```
OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0 Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                                                                                                                                                                                          Result
No.
  110
100
100
100
100
100
                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
1806
1799
1799
1791.5
1665.5
1642
926.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A_Geneseq_032802:*
1: /SIDSI/gcgdata/g
2: /SIDSI/gcgdata/g
3: /SIDSI/gcgdata/g
4: /SIDSI/gcgdata/g
4: /SIDSI/gcgdata/g
5: /SIDSI/gcgdata/g
6: /SIDSI/gcgdata/g
6: /SIDSI/gcgdata/g
7: /SIDSI/gcgdata/g
8: /SIDSI/gcgdata/g
9: /SIDSI/gcgdata/g
9: /SIDSI/gcgdata/
11: /SIDSI/gcgdata/
11: /SIDSI/gcgdata/
11: /SIDSI/gcgdata/
12: /SIDSI/gcgdata/
13: /SIDSI/gcgdata/
14: /SIDSI/gcgdata/
15: /SIDSI/gcgdata/
16: /SIDSI/gcgdata/
17: /SIDSI/gcgdata/
18: /SIDSI/gcgdata/
19: /SIDSI/gcgdata/
20: /SIDSI/gcgdata/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         July 11, 2002, 22:53:37; Search time 78.9 Seconds (without alignments) 484.276 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        747574 seqs, 111073796 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-700-397-3
1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | SIDS1/gcgdata/geneseq/geneseqp-embl/AA198.DAT:*
| SIDS1/gcgdata/geneseq/geneseqp-embl/AA199.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
  100.0
100.0
100.0
100.0
100.0
99.6
99.6
99.2
99.2
90.9
                                                                                                                                                                                                                                                                                                                Match
                                                                                                                                                                                                                                                                                                                                         Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MKTIQPKMHNSISWAIFTGL.....RRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                   Length
        344
344
355
344
344
344
344
344
343
343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapext 0.5
                                                                                                                                                                                                                                                                                                                     DB
                                                                                                                                                                                                                                                                                                                     Ħ
                              AAB44329
AAX57601
AAU12359
AAB31204
AAM40499
AAB19721
AAB19722
AAX41773
AAX41773
AAX41773
AAX41773
     AAW05153
                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Compugen Ltd.
        Amino acid sequenc
Human polypeptide
Human SECX Clone 1
Human SECX Clone 1
Human PRO37 prote
Human PRO37 prote
Human polypeptide
Human protein SEQ
Rat LAMP residues
                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                   Human PRO337 prote
Human protein SEQ
Human PRO337 polyp
```

907 50.2 315 17 AAMOS158 907 50.1 310 17 AAMOS156 902 49.9 304 17 AAMOS155 988.5 49.1 287 17 AAMOS159 885.5 49.2 287 17 AAMOS150 885.5 49.2 327 17 AAMOS150 885.5 49.2 327 17 AAMOS150 885.5 44.1 287 17 AAMOS156 815 45.1 352 21 AAAB44331 796.5 44.1 252 17 AAMOS168 795.5 44.1 252 17 AAMOS168 795.5 44.1 252 17 AAMOS168 796.5 16.0 1240 22 ABB13847 16.9 18.2 22 ABB13847 17.1 12.0 1240 22 ABB69485 18.4 315 22 ABB69485 284.5 15.8 848 21 AAV88565 270 15.0 1240 22 ABB69568 270 15.0 1240 22 ABB69686 270 15.0 729 22 ABB68566 270 14.9 14.9 22 ABB68566 270 14.9 14.9 152 22 ABB68568 284.5 14.9 1496 20 AAW8103 268.5 14.9 1496 20 AAW8103 269 14.5 1395 20 AAW8103 261 14.5 1395 20 AAW8103 261 14.5 1395 20 AAW8103 261 14.5 1395 20 AAV8440 14.5EP-2000. 18.FEB-2001 (first entry) Human PRO337 protein sequence SFQ ID NO:523. Human; secreted protein; transmembrane protein; expressed sequence Lag; detection; cancer. Human PRO337 protein sequence SFQ ID NO:523. Human; secreted protein, transmembrane protein; expressed sequence Lag; detection; cancer. Human PRO337 protein sequence SFQ ID NO:523. 14SEP-2000. 18FEB-2000; 2000NO-US04341. 08MAR-1999; 99US-0123957. 29MAR-1999; 99US-0123053. 20.5 14.4 496 20 ABB62052 21ARP.1999; 99US-0123053. 20.5 14.4 496 20 ABB62052 22DEC-1999; 99US-012505. 23UNI-1999; 99US-012505. 24DEC-1999; 99US-01258551.	00 322212222108	14 18	Hu ex Hc	08 Hu	RESULT AAB4432	338 344 444 444 444	110 110 110 110 110 110 110 110 110 110
315 17 AAW05158 310 17 AAW05156 304 17 AAW05156 304 17 AAW05159 287 17 AAW05160 326 22 AAG75020 354 22 AAB31212 354 22 AAB31212 354 22 AAB31212 354 22 AAB31212 352 17 AAW05168 281 22 ABB10253 141 22 ABB10253 142 24 ABG13847 872 22 ABG13847 872 22 ABG13847 873 32 ABB65542 AAB 32 ABB65544 848 21 AAB65574 22 AAB63943 1467 22 AAB63943 1470 22 AAB63044 848 21 AAB863044 848 21 AAB863044 848 21 AAB863044 848 21 AAB863044 848 21 AAB86304 846 22 AABB1023 1496 22 AAB1023 1496 22 AAB10303 1496 21 AAV0440 1498 22 AAB1587 159 22 AAB1587 159 22 AAB61587 139 22 AAB62052 AAV10460	08-MAR-19 19-MAR-19 21-MAR-19 21-APR-19 28-APR-19 14-MAY-19 23-JUN-19 26-JUL-19 26-JUL-19 30-NOV-19 30-NOV-19	-SEP-	Human; sec expressed Homo sapio WO2000537	08-FEB-200) >	270 269 268.5 268.5 268.5 267 267 261 261 260.5	900 900 900 8885.5 823 823 823 815 823 720.5 720.5 50.5 50.5 50.5 50.5 50.5 50.5 50.5
315 17 AAW05158 304 17 AAW05156 304 17 AAW05155 304 17 AAW05159 287 17 AAW05160 326 22 AAG75020 354 22 AAG75020 352 17 AAW05168 281 22 ABG13847 130 22 ABG13847 130 22 ABG13847 130 22 ABG13847 130 22 ABG13847 131 22 ABG5642 315 22 AAG7824 467 22 ABG6393 348 21 AAW88565 729 22 AAG8393 344 21 AAW88103 146 21 AAW18023 1496 21 AAW18023 1496 21 AAW1023 1496 22 ABG1587 1496 22 AAG1587 159 20 AAW1363 1395 20 AAW1363 13		2	ereted sequen ens.			15.0 14.9 14.9 14.9 14.9 14.5 14.5	449.1 449.1 447.0 444.1 118.4 116.9 116.9 115.8
7, AAW05158 7, AAW05156 7, AAW05155 7, AAW05159 7, AAW05150 20, AAW05160 22, AAW05160 22, AAW05168 23, AAW05168 24, AAW05168 25, AAW05168 26, AAW05168 27, AAW05168 28, AAW05168 29, AAW05168 20, AAW05168 21, AAW05168 22, AAB6542 22, AAB65564 23, AAW05168 22, AAB65564 23, AAW05168 22, AAB65564 23, AAW05168 23, AAW05168 24, AAW05168 25, AAW0513816 26, AAW0513816 27, AAW0513816 28, AAW05168 29, AAW0513816 20, AAW0513816 20, AAW0513816 21, AAW05168 22, AAW0513816 23, AAW0513816 24, AAW051381 24, AAW051381 25, AAW051381 26, AAW051381 27, AAW051381 28, AAW051381 29, AAW051381 20, AAW051381	99WO-US 99US-01 99US-01 99US-01 99US-01 99US-01	sn-owoc	protei ce tag	- о		729 1496 1496 1498 1498 1395 1395	304 304 287 287 352 352 352 252 252 252 251 141 141 130 313 315 413 315 413 315 413 315
AW05158 AW05156 AW05159 AW05159 AW05159 AW05160 ABJ31212 AW05168 BBG13847 AW05168 BBG13847 AW05168 BBG13847 AW1858947 AW185894 AW18603933 AW181030 AW108023	05021 2395 2395 26777 26777 3023 3144 13144 13428 14103 14569 16250 16250	04343	n; tr ; det	try) equen		22 22 20 21 21 22 20 20 20	17 17 17 17 17 17 17 17 17 17 17 22 22 22 22 22 22 22 22 22 22 22 22 22
	7.00.2.3.7.3.7.3.7.3.7.3.6.6.6.6.6.6.6.6.6.6.6	.	ane	SEQ ID NO:52	ALIGNMENTS	ABB6856 AAU18023 AAW81030 AAY70469 ABB11587 AAB02771 AAG13563 AAY08401 ABB62052	AAW05159 AAW05160 AAW05160 AAG75020 AAB31212 AAB44331 AAW05167 AAW05168 ABB10253 ABG13848 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG13847 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947 ABG55947
			EST; CYTOStallo			Human immunogiobul Melanoma associate Human p53 target m Human p53 target m Human peroxidasin Human secreted pro Drosophila Robo 1 Drosophila sp. ROB Drosophila melanog	Human mature LAMP. Human LAMP residues Rat LAMP residues Human colon cancer Amino acid sequenc Human RO4993 prot Human LAMP residues Human LAMP residues Human CDNA SEQ ID Novel human diagno Novel human diagno Drosophila melanog Human MCAM 140kD i Drosophila melanog

```
20
                                                                                                                                                                                                                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                         AAY57601
ID AAY
                                                                                                                                                                                                                          Db
                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                   Вþ
                                                                                                                                                                                            γ
                                                                                                                밁
                                                                                                                                       80
XX AC X
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JAN-2000;
06-JAN-2000;
06-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-DEC-1999;
30-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Goddard
Kljavin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAC78458 to AAC78599 represent polynucleotide and EST (expressed sequence tag) sequences which encode secreted or transmembrane PRO polypeptides. The PRO polynucleotides and polypeptides have keytostatic activity. The polynucleotides and polypeptides can be used for detecting the presence of PRO polypeptides in samples, for linking bioactive molecules to cells and for modulating biological activities.of cells, molecules to cells and for specific targeting. The polypeptide targeting using the polypeptides for specific targeting. The polypeptide targeting can be used to kill the target cells, e.g. for the treatment of cancers. The polypeptide pairs provide specific targeting of bioactive molecules to cells. AAC78600 to AAC78987 represent PCR primers and probes used in the isolation of the PRO polynucleotide sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel PRO polypeptides and polynucleotides used in detection methods, to target bioactive molecules to specific cells, and to modulate cellular activities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 12; Fig 222; 636pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shelton DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ferrara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ashkenazi AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                           AAY57601 standard;
                                                                                                                                                                                               241
                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                           121
                                                                                                                301
                                                                                                                                          301
                                                                                                                                                                     241
                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                           دعز
                                                                                                                                                                                                                                                                                                                                                                                                       1 MKTIQPKMHNSISWAIFTGLAAICLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000-611443/58.
                                                                                                                                                                                                                                                                                                                                                                NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                        mktiqpkmhnsiswaiftglaalclfqgvpvrsgdatfpkamdnvtvrqgesatlrctid 60
                                                                                                                                                                  nhpktsrvhliv qvspkive is s disine gnn is ltc i at {\tt grpeptvtwrhisg} kav {\tt gfv}
                                                                                                                                                                                                                                                                                            NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVIWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                   nrvtrvawlnrstily agndkwcldprvvllsntqtqysieiqnvdvydegpytcsvqtd\\
                                                                                                              lghtnasimlfgpgavsevsngtsrragcvwllpllvlhllikf 344
                                                                                                                                          LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                          sedeyleiqgitreqsgdyecsasndvaapvvrrvkvtvnyppyiseakgtgvpyggkgt
                                                                                                                                                                                                                                    SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVEVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC78590.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AJ, Baker KP,
Filvaroff E,
Godowski PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99WO-US31243.

99WO-US31274.

2000WO-US00219.

2000WO-US00277.

2000WO-US00376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      344 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kuo SS, Nap
Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                               Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Napier MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Botstein D, Desnoyers I Fong S, Gao W, Gerber Grimaldi CJ, Gurney AL, peoni NI Tumas D, Williams PM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                344 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1806; DB 21;
Pred. No. 9.9e-149;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Desnoyers -. W, Gerber H, Gerrey AL, Hillan KJ;
J, Paoni NF, Roy MA;
J, Paoni NF, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerritsen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·李宁蒙宝
                                                                                                                                                                                                                                                                                                                                                                                                                                                         : 0:==
                                                                      ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
```

AAY57601;

```
Qy
                                                                                                                                                                                                          В
                                                                                                                                                                                                                                 QУ
                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                   γ
                                                                                                                                                       멍
                                                    g
                                                                           Ω
                                                                                                      р
                                                                                                                              20
                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; haematopoietic cell regulation; tissue generation; reparation; activin; inhibin; taxis; chemotaxis; blood coagulation; thrombus; receptor; ligand; autoimmune; infection-related immunodeficiency; inflammatory disorder; neurological disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-MAR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                 protein. The novel human protein can be used in therapeutic drugs for the prevention and treatment of a broad range of disorders including autoimmune and infection-related immunodeficiency, inflammatory disorders, and neurological diseases. The novel protein is expected of having haematopoietic cell regulatory activity, tissue generation/reparation activity, activin/inhibin activity, taxis/chemotaxis activity, blood coagulation and thrombus activity, and receptor/ligand activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New polypeptides of human origin having ceigeneration, coagulant and other activities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fukushima D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W09958668-Al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 38-40; 84pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ONO ( YONO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents a specifically claimed novel human
                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                 181
                            301
                                                    241
                                                                             241
                                                                                                       181
                                                                                                                                                         121
                                                                                                                                                                                 121
  301
                                                                                                                                                                                                          61
                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                               دسو
                                                                                                                                                                                                                                                                                   1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000-062298/05
                                                 NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVVDEGPYTCSVQTD 120
                                                                                                   sedeyleiqgitreqsgdyecsasndvaapvvrrvkvtvnyppyiseakgtgvpvgqkgt 240
                                                                                                                SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                      nhpktsrvhlivgvspkiveissdisinegnnisltciatgrpeptvtwrhispkavgfv 180
                                                                                                                                                                              NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                        nrvtrvawlnrstilyagndkwcldprvvllsntqtqysieignvdvydegpytcsvqtd 120
                                                                                                                                                                                                                                                           AAZ47892,
                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PHARM CO LTD
                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO:1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shibayama S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98JP-0131815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-JP02485
                                                                                                                                                                                                                                                                                                                                                                                ΑA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ47893
                                                                                                                                                                                                                                                                                                                  100.0%; Score 1806; DB 21;
100.0%; Pred. No. 9.9e-149;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cell regulatory, tissue
                                                                                                                                                                                                                                                                                                                                             DB 21;
                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                              Length 344;
                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                         Gaps
```

0;

```
AAU12359
ID AAU1
 01-DEC-1999;

01-DEC-1999;

02-DEC-1999;

02-DEC-1999;

02-DEC-1999;

02-DEC-1999;

16-DEC-1999;

16-DEC-1999;

20-DEC-1999;

20-DEC-1999;

30-DEC-1999;

30-DEC-1999;

30-DEC-1999;

11-FEB-2000;

11-FEB-2000;

18-FEB-2000;

18-FEB-2000;

18-FEB-2000;

18-FEB-2000;

19-FEB-2000;

24-FEB-2000;

24-FEB-2000;

24-FEB-2000;

24-FEB-2000;

24-FEB-2000;

21-MAR-2000;

21-MAR-2000;

21-MAR-2000;

21-MAR-2000;

21-MAR-2000;

21-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast; prostate; cervical; tumour necrosis factor-alpha; 'INF-alpha; cartilage; ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte; A-peptide; factor VIIA; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU12359 standard; Protein; 344 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAU12359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-DEC-2000; 2000WO-US32678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200140466-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-JUN-2001
                                                                                                                                Isolated, secretory and transmembrane PRO polypeptide used to detect other PRO polypeptides, link bloactive molecules to cells expressing PRO polypeptides, and detect the presence of mammalian tumours e.g. lung, breast, prostate, cervical
                                                                                                                                                                                                                                                          Gerritsen
                                                                                                                                                                                                                                               Smith
                                                                                                                                                                                                                                                                         Baker
                                                                                                                                                                                                                                                                                                                             10-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                   22-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                  17-MAY-2000;
  ANU12172-AAU12446 represent novel human secretory and transmembrane PRO polypeptides. The PRO polypeptides are useful to detect other PRO polypeptides, to link bloactive molecules to cells expressing PRO polypeptides, to modulate biological activities of cells expressing PRO polypeptides, and to detect the presence of mammalian lung, colon, breast, prostate, rectal, cervical or liver tumours by comparing PRO polypeptide expression in a cell sample to that in a control sample.
                                                                                                                                                                                                        N-PSDB; AAS21431
                                                                                                                                                                                                                                                                                                 (GETH ) GENENTECH INC.
polypeptide
                                                                                                           Claim 12;
                                                                                                                                                                                                                    2001-408281/43.
                                                                                                           Fig 376; 813pp; English.
                                                                                                                                                                                                                                               Stewart TA,
                                                                                                                                                                                                                                                             ME,
                                                                                                                                                                                                                                                         Beresini M,
ME, Goddard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US00277.
2000WO-US00376.
2000WO-US03565.
2000WO-US04341.
2000WO-US04342.
                                                                                                                                                                                                                                                                                                                                                                                2000WO-US07377
2000WO-US07532.
2000WO-US08439.
2000WO-US13705.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                      2000WO-US14042
2000WO-US14941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US04914.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000WO-US04414
                                                                                                                                                                                                                                                                                                                              2000WO-US30873
                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US05601.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US31243.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US30911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US30095.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99US-0170262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US28565.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US28564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US28551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US28301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US30999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US28634
                                                                                                                                                                                                                                    A, GOdOWSx110, Tumas D, Watanabe CK,
                                                                                                                                                                                                                                                  Deforge L, Desnoyers L, Filvaroff E,
A, Godowski PJ, Gurney AL, Sherwood :
Tumas D, Watanabe CK, Wood WI, Zhang
                                                                                                                                                                                                                                                                             Filvaroff E,
                                                                                                                                                                                                                                                                s
                                                                                                                                                                                                                                                                                Gao W;
```

Key Peptide

Location/Qualifiers /note= "signal peptide"

Homo sapiens. PRO6309;

21-DEC-2000.

WO200077037-A2

```
CC tumour necrosis factor-alpha (TNF-alpha) from human blood, the tumour necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or differentiation of chondrocytes, the proliferation or CC gene expression in pericyte cells, the release of proteoglycans from CC cartilage, the proliferation of inner ear utricular supporting cells or CC of T-lymphocytes, the release of a cytokine from peripheral blood CC monocytes (PBMCS), or the proliferation of endothelial cells. Some of CC monocytes (PBMCS), or the proliferation of endothelial cells of the PRO polypeptides may modulate glucose or free fatty acid uptake by CC the PRO polypeptides may modulate glucose or inhibit binding of A-peptide CC skeletal muscle cells or by adipocytes; or inhibit binding of A-peptide CC molecules involved in binding interactions. The polynucleotides encoding CC PRO polypeptides can be used to generate probes, antisense RNA/DNA, CC transgenic or knock out animals and can be used in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB31204
ID AAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                              Human; secreted protein; transmembrane protein; PR0196; PR0444; PR0183; PR0185; PR0210; PR0215; PR0217; PR0242; PR0288; PR0365; PR01361; PR01308; PR01183; PR01272; PR01419; PR04999; PR07170; PR0248; PR0353; PR01318; PR01600; PR0940; PR0533; PR0301; PR0187; PR0373; PR01411; PR04356; PR02630; PR02630;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB31204 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amino acid sequence of human polypeptide PRO337.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 nhpktsrvhlivgvspkiveissdisinegnnisltciatgrpeptvtwrhispkavgfv 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nrvtrvawlnrstilyagndkwcldprvvllsntqtqysieiqnvdvydegpytcsvqtd 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NRYTRYAMLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LGHTNASIMLEGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                {\tt lqceasavpsaefqwykddkrliegkkgvkvenrpflskliffnvsehdygnytcvasnk~300}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCEASAVPSAEFOWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sedeyleiqgitreqsgdyecsasndvaapvvrrvkvtvnyppyiseakgtgvpvgqkgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      344;
                                                                                                                                                                                                                                                                                                                        cell death; genetic disorder; transgenic animal; gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1806; DB 22;
Pred. No. 9.9e-149;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
```

```
polypeptide. The specification describes human polypeptides) designated pro196, pro244, pro183, pro185, pro210, pro215, pro217, pro242, pro288, pro355, pro1361, pro1388, pro186, pro218, pro186, pro218, pro218, pro248, pro355, pro1361, pro4356, pro246, pro253, pro341, pro4356, pro246, pro265, pro941, pro10096, pro6003, pro330, pro350, pro2530 and pro6309. The biological activity of cells pro6004, pro350, pro2630 and pro6309. The biological activity of cells can be modulated with agents that bind to these polypeptides, resulting can be death of the cells. The polynucleotides encoding these in the death of the cells. The polynucleotides encoding these polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides, as a hybridisation probe to screen libraries to isolate polypeptides. The polynucleotides can diso be used in gene therapy e.g. to creagents. The polynucleotides can also be used in gene therapy e.g. to
Вþ
                               δÃ
                                                                    D
                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-DEC-1999;
07-DEC-1999;
07-DEC-1990;
05-JAN-2000;
18-FEB-2000;
18-FEB-2000;
01-MAR-2000;
02-MAR-2000;
20-MAR-2000;
30-MAR-2000;
15-MAY-2000;
17-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-SEP-1999;
15-SEP-1999;
15-SEP-1999;
30-NOV-1999;
01-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-JUL-1999;
26-JUL-1999;
17-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Isolated nucleic acid molecule encoding a PRO polypeptide which is a transmembrane polypeptide is useful for gene therapy and identification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Paoni NF, Roy MA,
Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ashkenazi AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 12; Fig 52; 244pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB;
                                                                                                                                                                                                                                                           reagents. The polynucleotides can replace a defective gene.
                                                                                                                                                                                                                              Sequence
                                                                                                                                           Local Similarity 100
nes 344; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   related polypeptides
                                  61
   61
                                                                     <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present sequence represents a human secreted and transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-050091/06
nrvtrvawlnrstilyagndkwcldprvvllsntgtgysieignvdvydegpytcsvqtd 120
                                                                                      MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                  NRWTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                    \verb|mktiqpkmhnsiswaiftg| | aalclfqgvpvrsgdatfpkamdnvtvrqgesatlrctid| \\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAC87037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US00219
2000WO-US04341
2000WO-US04342
2000WO-US04414
2000WO-US05601
2000WO-US05841
2000WO-US07377
2000WO-US07377
2000WO-US07377
2000WO-US07377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fong S,
                                                                                                                                                                                                                                344 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US14042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , Baker KP, Botstein DA, Desnoyers L, Ea
Fong S, Gao W, Gerber H, Gerritsen ME, G
Gurney AL, Kljavin IJ, Mather JP, Napie
Dy MA, Stewart TA, Tumas D, Watanabe CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9908-0169495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US28565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US28313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US21090.
99WO-US21547.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US20594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9905-0149396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0139695.
99US-0145070.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US28301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US20111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -0145698
                                                                                                                                                            100.0%;
                                                                                                                                             0;
                                                                                                                                                            Score 1806; DB 22;
Pred. No. 9.9e-149;
                                                                                                                                               Mismatches
                                                                                                                                                                                  DB 22;
                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Napier MA,
                                                                                                                                                 Indels
                                                                                                                                                                                Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eaton DL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goddard A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      er MA, Pan J;
Williams PM;
                                                                                                                                                 0;
                                                                                                                                                 Gaps
                                                                             60
                                                                                                                                                   0;
```

```
Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ър
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                 21-JAN-2000;
25-APR-2000;
09-JUL-2000;
19-JUL-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                       peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAM40499;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAM40499 standard; Protein; 355 AA.
                                                                                                                                                                                                                                                                                                                                                                                Human; nootropic; immunosuppressant; cytostatic; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                  Human polypeptide SEQ ID NO 5430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                       WO200153312-A1
                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                        2hao
                                                                                                                                              Tang
Wang
                                                                                                                                                                                                  14-SEP-2000;
19-OCT-2000;
                                                                                                                                                                                                                                                                     26-DEC-2000;
                                                                                                                                                                                                                                                                                                                                        leukaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                    N-PSDB; AAI59655
                                                                                                                                                                                          29-NOV-2000;
                                                                    Example
                                                                                                                                                                        (HYSE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NHPKTSRVHLIVQVSPKIVEISSDISINBGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLYLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              {\tt lghtnasimlfgpgavsevsngtsrragcvwllpllvlhlllkf}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                {\tt lgceasavpsaefqwykddkrliegkkgvkvenrpflskliffnvsehdygnytcvasnk}
                                                                                                                       2001-442253/47.
                                                                                                                                        QA,
                                                                                                                                      Wang Z,
Zhou P,
                                                                                                                                                                          HYSEQ INC
                                                                    2; SEQ ID NO 5430; 10078pp; English
                                                                                                                                                                                                ); 2000US-0552317.

); 2000US-05298042.

); 2000US-06529312.

); 2000US-0653450.

; 2000US-0662191.

2000US-0693036.
                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                   2000US-0488725
                                                                                                                                                                                                                                                                      2000WO-US34263
                                                                                                                                                                                          2000US-0727344
                                                                                                                                       Asundi V, Ch
Wehrman T, Y
Goodrich R,
                                                                                                                                                Chen R, Ma Y,
Xu C, Xue AJ,
                                                                                                                                          Drmanac RT;
                                                                                                                                                    Qian XB,
Yang Y,
                                                                                                                                                   Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                              Ren
                                                                                                                                                     Zhang
                                                                                                                                                             hzj
-
                                                                                                                                                              Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                              Ö
```

The invention relates to human nucleic acids (AAI577798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polypucleotides are useful ingene therapy. A composition containing a polypeptide or polypucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as

```
666666666666688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB19721
ID AAB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Note: The sequence data for this patent did not form part of the printed specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB19721;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB19721 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Sines 344;
                                                                                                                                                                                                                                                                                                                                                                                                 Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human SECX Clone 11753149.0.6-encoded protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                               WO200061754-A2
                                                                                                                                                                                                                                                                      Region
                                                                                                                                                                                                                                                                                                                          Protein
                                                                                                                                                                                                                                                                                                                                                                       Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N.S disorders
                  03-MAR-2000;
                                                 09-APR-1999;
                                                                                              07-APR-2000; 2000WO-US09392
                                                                                                                                                19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  {\tt 12~mktiqpkmhnsiswaiftglaalclfqgvpvrsgdatfpkamdnvtvrqgesatlrctid}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MKTIQPKNHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESA與LRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nrvtrvawlnrstilyagndkwcldprvvllsntgtgysieignvdvydegpytcsvqtd 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NRVTRVAMLNRSTILLYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sedeyleiqgitreqsgdyecsasndvaapvvrrvkvtvnyppylseakgtgvpvgqkgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVFVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             {\tt lghtnasimlfgpgavsevsngtsrragcvwllpllvlhllkf}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 \\ qceasavps a efqwykddkr \\ 1 \\ iegkk \\ gvkvenrpflskliffnvseh \\ dygnyt \\ cvasnken \\ flskliffnvseh \\ dygnyt \\ cvasnken \\ flskliffnvseh \\ dygnyt \\ cvasnken \\ flskliffnvseh \\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human; diagnosis; therapy; cell adhesion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                          2000US-0128514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA;
                                                                                                                                                                                                                                                                      /label= Signal_peptide
34..344
/label= Mature_protein
327..344
                                                    99US-0128514.
                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                   "C-terminal membrane attachment sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1806;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ΑA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1e-148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
```

```
AAB19722
ID AAB1
                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                             ΩV
                                                                                                                                                                                                                                                                                                                                                        뫄
                                                                                                                                                                                                                                                                         QY
 FT FT FTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 343; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is that of the protein encoded by novel SECX Clone 11753149.0.6 (see AAA88790), which resembles rat neural cell adhesion molecule neurotrimin and human opicid binding protein/cell adhesion molecule OBCAM. The invention provides novel SECX polynucleotides (see AAA88789-804) and the secreted or membrane-associated proteins encoded by them (see AAB19720-34). SECX polynucleotides, polypeptides and antibodies can be used in the detection, diagnosis and treatment (including gene therapy) of a horad rance of mathological entars
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SECX polypeptides and the nucleic acids that encode them, useful for diagnosing, preventing and treating e.g. cancers, inflammation, arthritis and immunological disorders –
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; AAA88790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 5; Fig 2; 143pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fernandez E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a broad range of pathological states.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                         AAB19722 standard; Protein;
Protein
                                   Key
                                                                                                             Human SECX Clone 11753149.0.37-encoded protein
                                                                                                                                                               AAB19722;
                         Peptide
                                                              Homo sapiens
                                                                                       SECX;
                                                                                                                                        19-FEB-2001
                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            بر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000-679487/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                    SEDEVLEIQGITREOSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                        nhpkts rvhliv qvspkive is s disine gnn is {\tt ltc} i at {\tt grpeptvtwrh} is pkavg fv
                                                                                                                                                                                                                                                                                                                                                                                                                     NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                    lghtnasimlfgpgavsevsngtsrragcvwlppllvlhllkf
                                                                                                                                                                                                                                                                 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                     {\tt lqceasavpsaefqwykddkrliegkkgvkvenrpflskliffnvsehdygnytcvasnk}
                                                                                                                                                                                                                                                                                                                             LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                      sedeyleiggitreqsgdyecs as ndva apvvrrvkvtvnyppy is eakgtgvpvgqkgt\\
                                                                                       human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vernet
                                                                                     diagnosis; therapy; cell adhesion
                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA;
                       Location/Qualifiers
 /label= Signal_peptide 34..344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shimkets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1799;
pred. No. 4e
                                                                                                                                                                                           344 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4e-148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                            344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein/cell
SECX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                               30C
                                                                                                                                                                                                                                                                                                                                                                  240
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                    Вp
                                                                                                                                                                                                                                                                                                                                                                          Qy
                        AAY41773
ID AAY4
                                                                                                                                                                                                                    2
                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                       ΩV
                                                                                                                                                                                                                                                                                                  Dр
                                                                                         DЪ
                                                                                                               δÃ
                                                                                                                                           맑
                                                                                                                                                                Qy
                                                                                                                                                                                            Ъ
AC XX
                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence is that of the protein encoded by novel SECX Clone 11753149.0.37 (see AAA88791), which resembles rat neural cell adhesion molecule neurotrimin and human opioid binding protein/cell adhesion molecule OBCAM. The invention provides novel SECX polynucleotides (see AAA88789-804) and the secreted or membrane-associated proteins encoded by them (see AAB19720-34). SECX polynucleotides, polypeptides and antibodies can be used in the detection, diagnosis and treatment (including gene therapy) of a broad range of pathological states.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SECX polypeptides and the nucleic acids that encode them, useful diagnosing, preventing and treating e.g. cancers, inflammation, arthritis and immunological disorders –
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-APR-1999;
03-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-APR-2000; 2000WO-US09392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200061754-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-679487/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fernandez E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 5; Fig 3; 143pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
AAY41773;
                         AAY41773 standard; Protein;
                                                                                                                                                                                                                                                 121
                                                                                                                                            241
                                                                                                                                                                                                                       181
                                                                                         301
                                                                                                                  301
                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                    ب
                                                                                                                                                                                                                                                                                                                                                                  1 MKTIQPKNHNSISWATFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                   ω
                                                                                       nrvtrvawlnrstily agndkwcldprvvllsntqtqysieiqnvdvydegpytcsvqtd\\
                                                                                                                                                                                                                                                                                                                                                   \verb|mktiqpkm| hnsis \verb|waiftg|| a alclfqgvpvrsgdatfpkamdnvtvrqgesatlrctid|
                                                                                                                                                        LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                            {\tt sedeyleiqgitreqsgdyecs as ndva apvvrrvkvtvnyppy is eakgtgvpvgqkgt}
                                                                                                                                                                                                         SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                       NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                           {\tt lqceasavpsaefqwykddkrliegkkgvkvenrpflskliffnvsehdygnytcvasnk}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA88791
                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                    99.6%;
milarity 99.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0128514.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Vernet C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0128514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= Mature_protein 327..344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "C-terminal membrane attachment sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shimkets
                                                                                                                                                                                                                                                                                                                                                                                                        0;
                             343 AA
                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1799; DB 2
Pred. No. 4e-148;
                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 21; Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      useful tor
                                       100
                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                300
                                                                                                                                                                                                                            240
                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                            0;
```

```
13-MAR-1998;
17-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
25-MAR-1998;
26-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
30-MAR-1998;
30-MAR-1998;
31-MAR-1998;
31-MAR-1998;
31-MAR-1998;
01-APR-1998;
02-APR-1998;
03-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-MAR-1998;
11-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation; probe; blood coagulation disorder; cancer; cellular adhesion disorder; secreted protein; transmembrane protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PRO337 protein sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W09946281-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAR-1998;
12-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
98US-0079920

98US-0079923

98US-0080107

98US-0080107

98US-0080127

98US-0080327

98US-0080333

98US-0081049

98US-0081071

98US-0081071

98US-008129

98US-008129

98US-008129

98US-008129

98US-008129

98US-0081952

98US-0082568

98US-0082568

98US-0082569

98US-0083568

98US-0083392

98US-0083392

98US-0083392

98US-0083496

98US-0083541

98US-0083554

98US-0083554

98US-0083553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            980S-0079656.
980S-0079663.
980S-0079664.
980S-0079689.
980S-0079728.
980S-0079728.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US05028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0078936
98US-0078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0078886
98US-0078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0040220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -0077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -0077649
```

```
멍
                                                          Q
                δÃ
밁
                                                                                 Matches
                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-APR-1998
05-MAY 1998
06-MAY 1998
06-MAY 1998
07-MAY 1998
07-MAY 1998
07-MAY 1998
07-MAY 1998
07-MAY 1998
07-MAY 1998
13-MAY 1998
13-MAY 1998
13-MAY 1998
13-MAY 1998
15-MAY 1998
15-MAY 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                18-MAY-1998;
22-MAY-1998;
22-MAY-1998;
22-MAY-1998;
22-MAY-1998;
28-MAY-1998;
28-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAY-1998;
30-JUL-1998;
11-SEP-1998;
                                                                                                                                                             and their polynucleotides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generatio of antisense sequences. They can also be used to create transgenic animals. The proteins can be used to treat a variety of diseases and disorders, depending on their function. Diseases that may be treated include blood coagulation disorders, cancers and cellular addession disorders. They may also be used to raise antibodies. AAZ33891 to AAX34338, and AAV41685 to AAX41774 represent polynucleotide and AAX41876 sequence given in the exemplification of the present
                                                                                                                                                                                                                                                                                                  New secreted and transmembrane polypeptides and their polynucleotides, useful for treating blood coagulation disorders, cancers and cellular adhesion disorders -
                                                                                                                                                                                                                                                           The
                                                                                                                                                                                                                                                                                Claim 12; Fig 222;
                                                                                                                                                                                                                                                                                                                                                                                               (GETH
                                                                                                                                   Sequence
                    61
 61
                                         ш
                                                                                                                                                                                                                                                          present invention describes secreted and transmembrane polypeptides
                                                                                                                                                                                                                                                                                                                                                        1999-551358/46
                                                                                                                                                                                                                                                                                                                                                                                              _
                                                           MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
nrvtrvawlnrstilyagndkwcldprvvllsntqtqysielqnvdvydegpytcsvqtd 120
           NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                 al Similarity
343; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                GENENTECH
                                       Goddard A,
                                                                                                                                    343
                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0084441.
98US-0084598.
98US-0084600.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0083742.
98US-0084366.
98US-0084414.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0086392.

98US-0086414.

98US-0086430.

98US-0086486.

98US-0087098.

98US-0087106.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .S086
                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0094651.
98US-0100038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0085697
98US-0085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0085704.
98US-0086023
                                                                                                                                                                                                                                                                                                                                                                                                INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -0084640.
-0084643.
                                                                                                                                                                                                                                                                                 530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -0085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -0084639.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .0084598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -0085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -0085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0084627.
                                                                                            99.28;
99.78;
                                                                                                                                                                                                                                                                                                                                                                              Gurney A,
                                                                                  0;
                                                                                  Score 1791.5;
pred. No. 1.8e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                               Yuan
                                                                                                                                                                                                                                                                                                                                                                               Ċ,
                                                                                               .8e-147;
                                                                                                                                                                                                                                                                                                                                                                                Baker
                                                                                                        DB 20;
                                                                                     0:
                                                                                                                                                                                                                                                                                                                                                                                KP,
                                                                                     Indels
                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                 Chen
                                                                                                                                                                                                                                             for generation
                                                                                     <u>بـ</u>
                                                                                    Gaps
                                              60
                                                                60
```

```
AAM38713
ID AAM3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JAN-2007;
25-APR-2000;
09-JUL-2000;
19-JUL-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAM38713 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAM38713;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                 Wang
                                                                                                                                                                                                                                                                                                                                                                                        Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200153312-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                  Zhao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    leukaemia.
                                                                                                                                                                                                                        Novel nucleic acids and polypeptides, such as central nervous system injurie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-SEP-2000;
19-OCT-2000;
                                                                                                                                                                                                                                                                                       N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                              (HYSE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sedeyleiggitreqsgdyecsasndvaapvvrrvkvtvnyppyiseakgtgvpvgqkgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 \\ qceasavps a efqwykddkrliegkk \\ gvkvenrpflskliffnvseh \\ dygnyt \\ cvasnkligen \\ gvkynyt \\ gvkynyt \\ cvasnkligen \\ gvkynyt \\ gvky
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                οΑ,
TY
                                                                                                                                                                                                                                                                                     2001-442253/47.
DB; AAI57869.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                HYSEQ
                                                                                                                                                                                                                                                                                                                                                Liu C
Wang Z
Zhou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0488725.
2000US-0552317.
2000US-0598042.
2000US-0620312.
2000US-0653450.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0662191.
2000US-0693036.
2000US-0727344.
                                                                                                                                                                                                                                                                                                                                            u C,
                                                                                                                                                                                                                                                                                                                                                                                                                                INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US34263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                     Asundi V,
Wehrman T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein;
                                                                                                                                                                                                                                                                                                                                                    Goodrich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1858
                                                                                                                                                                                                                                                                                                                                                      ×
                                                                                                                                                                                                                                                                                                                                                                       Chen
Xu C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA
                                                                                                                                                                                                                            injuries
                                                                                                                                                                                                                                                                                                                                                    nen R, Ma Y,
Ku C, Xue AJ,
Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                   ıc,
                                                                                                                                                                                                                                                      useful
                                                                                                                                                                                                                                                                                                                                                                         Qian XB,
Yang Y,
                                                                                                                                                                                                                                                      for treating disorders
                                                                                                                                                                                                                                                                                                                                                                             Zhang
                                                                                                                                                                                                                                                                                                                                                                                                  Ren F,
                                                                                                                                                                                                                                                                                                                                                                             J.
                                                                                                                                                                                                                                                                                                                                                                                                     Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                     D;
```

The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system disease, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic

Example

ω ••

SEQ ID NO 1858; 10078pp; English.

```
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
멅
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, dwg screening, assays for receptor activity, arthritis and inflammation, leukaemias and C.N.S disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                            activin; inhibin; taxis; chemotaxis; blood coaquiation; thrombus; receptor; ligand; autoimmune; infection-related immunodeficiency; inflammatory disorder; neurological disease.
                                                                                                                                                                                                                                              Human; haematopoietic cell regulation; tissue generation;
                                                                                                                                                                                                                                                                                                                                           AAY57602 standard; Protein;
                                                                                                                                                                                                                                                                        Human protein SEQ ID NO:4
                                                                                                                                                                                                                                                                                              10-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          129
             WPI; 2000-062298/05.
N-PSDB; AAZ47894.
                                                                    (ONOY ) ONO PHARM CO LTD
                                                                                             14-MAY-1998;
                                                                                                                   13-MAY-1999;
                                                                                                                                         18-NOV-1999
                                                                                                                                                                 WO9958668-A1
                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                    309
                                                                                                                                                                                                                                                                                                                                                                                                                         309
                                                                                                                                                                                                                                                                                                                                                                                                                                                249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12 ISWAIFTGLAALCLF---QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                   10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hlivqvspkiveissdisinegnnisltciatgrpeptvtwrhispkavgfvsedeylei 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     lnrstilyagndkwcldprvvllsntqtqysieignvdvydegpytcsvqtdnhpktsrv 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LNRSTILYAGNDKWCLDDRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mlfgpgavsevsngtsrragcvwllpllvlhilikf 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qgitreqsgdyecsasndvaapvvrrvkvtvnyppyiseakgtgvpvgqkgtlqceasav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEI 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  320;
                                                                                                                                                                                                                                                                                                                                                                                                              MLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                             PSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAV 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The sequence data
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             344 AA;
                                               Ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                Shibayama
                                                                                                                    99WO-JP02485
                                                                                              98JP-0131815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for this patent did
                                                ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      w
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1665.5; DB 22; Pred. No. 1.6e-136;
                                                                                                                                                                                                                                                                                                                                               313 AA.
                                                  Tada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                   Œ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  part of the printed
                                                                                                                                                                                                                                                    reparation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                344;
                              ď.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
```

```
γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŠÕ
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 313;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptides of human origin having cell regulatory, tissue generation, coagulant and other activities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         autoimmune and infection-related immunodeficiency, inflammatory disorders, and neurological diseases. The novel protein is expected of having haematopoietic cell regulatory activity, tissue generation/ reparation activity, activin/inhibin activity, taxis/chemotaxis activity, blood coagulation and thrombus activity, and receptor/ligand activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a specifically claimed novel human protein. The novel human protein can be used in therapeutic drugs for the prevention and treatment of a broad range of disorders including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 46-47; 84pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                         limbic system associated membrane protein; LAMP; self binding domain; antibody-like; cell surface adhesion protein; neuron; monoclonal antibody; 269; growth; differentiation; epilepsy; Alzheimer's disease; schizophrenia; neural stem cell.
                                                                                                                                                                                                                                                                                                      AAW05153 standard;
                                                                                               Peptide
                                                                                                             Key
                                                                                                                                                                                                                            Rat LAMP residues 1-332.
                                                                                                                                                                                                                                                     22-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 nisltciatgrpeptvtwrhispkavgfvsedeyleiggitregsgdyecsasndvaapv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 152 NISLICIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGDYECSASNDVAAPV 211
                                                                                                                                      Rattus rattus
                                     W09630052-A1
                                                                        Protein
                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                            332
                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                              11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sntqtqysieiqnvdvydegpytcsvqtdnhpktsrvhlivqvspkiveissdisinegn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNTOTOYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVOVSPKIVEISSDISINEGN 151
                                                                                                                                                                                                                                                                                                                                                                                                                vrrvkvtvnyppyiseakgtgvpvgqkgtlqceasavpsaefqwykddkrliegkkgvkv 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIEGKKGVKV
                                                                                                                                                                                                                                                                                                                                                                  liplivihilikf
                                                                                                                                                                                                                                                                                                                                                                                            LLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
                                                                       /note= "Signal peptide"
29..338
                                                                                                             Location/Qualifiers
                                                          /note= "Mature protein"
                                                                                                                                                                                                                                                                                                         Protein;
                                                                                                                                                                                                                                                                                                                                                                      313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                         338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1642; DB 21;
Pred. No. 1.6e-134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91
```

0;

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                              Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                ďζ
                                                                                                                                                                                                γ
                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                   δÃ
 BXBXBXB
                                                                                                         AAW05154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA encoding limbic system associated membrane protein self binding domain - useful in treatment of excessive neural growth in limbic system, e.g. in animal having epilepsy, Alzheimer's disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the formation of connections between adjacent neurons. LAMP is bound by the monoclonal antibody 269 and is thought to be involved in the growth and differentiation of certain neurons. The protein is highly conserved and the human and rat sequences differ in only four amino acids. LAMP nucleic acids, or soluble LAMP analogues, can be used to treat an animal with excessive neural growth in the limbic region, i.e where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequences given in AAW05152-70 represent fragments of limbic system associated membrane protein (LAMP) self binding domain. LAMP is a self-binding, antibody-like cell surface adhesion protein, which causes the formation of connections between adjacent neurons. LAMP is bound by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fischer I, Levitt PR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UMDJ-) UMDNJ UNIV NEW JERSEYS HEALTH SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the animal has epilepsy. Alzheimer's disease or schizophrenia. Neurostem cells transformed with an expression vector comprising one of these nucleic acids, can be used to treat neuropathologies involving the limbic system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Rat LAMP residues 1-332
                               22-MAY-1997
                                                             AAW05154;
                                                                                           AAW05154 standard; Protein; 338
                                                                                                                                                                                                                                                                                                      195
                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                    135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Sin
                                                                                                                                                                        314 i-ngsislavplwllaaslfcllsk 337
                                                                                                                                                                                                                                                                                                                                                                                                   139
                                                                                                                                                                                                          319
                                                                                                                                                                                                                                        255
                                                                                                                                                                                                                                                                                                                                                                                                                                75 hdkwsldprvelekrhaleyslriqkvdvydegsytcsvqtqhepktsqvylivqvppki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 lrllcllptglpvrsvd--fnrgtdnitvrqgdtailrcvvedknskvawlnrsgiifag 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79
                                                                                                                             12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1996-455009/45
                                                                                                                                                                                                                                                                                                                                  YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD
                                                                                                                                                                                                                                                                                                                                                                snissdvtvnegsnvtlvcmangrpepvitwrhltplgrefegeeeyleilgitregsgk 194
                                                                                                                                                                                                                                                                                                                                                                                                VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                              NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                      VSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                                                                      dtr-insangleiksteggssitvtnvteehygnytcvaanklgvtnaslvlfrpgsvrg 313
                                                                                                                                                                                                                                                                    DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                  yecka a nevs sadvkqvkvtvnypp {\tt titesks} neatt {\tt grqaslkceasavpapdfewyrd}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7; Page 40-42; 87pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT42080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96WO-US04397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95US-0414657.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51.3%;
55.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pimenta A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 926.5; DB 1
Pred. No. 2.8e-72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhukareva V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 17; Length 338;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ig.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Neural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                          134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      78
                                                                                                                                                                                                                                                                                                            254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.
```

```
limbic system associated membrane protein; LAMP; self binding antibody-like; cell surface adhesion protein; neuron; monoclonal antibody; 269; growth; differentiation; epilepsy; monoclonal antibody; 269; growth; differentiation; epilepsy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alzheimer's disease; schizophrenia; neural stem cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus rattus
                                                                                                                  The sequences given in AAW05152-70 represent fragments of limbic system associated membrane protein (LAMP) self binding domain. LAMP is a self-binding, antibody-like cell surface adhesion protein, which causes the formation of connections between adjacent neurons. LAMP is bound by the monoclonal antibody 269 and is thought to be involved in the growth and differentiation of certain neurons. The protein is highly conserved and the human and rat sequences differ in only four amino acids. LAMP nucleic acids, or soluble LAMP analogues, can be used to treat an nucleic acids, or soluble LAMP analogues.
                                                                                                                                                                                                                                                                                                                               DNA encoding limbic system associated membrane protein self binding domain - useful in treatment of excessive neural growth in limbic system, e.g. in animal having epilepsy, Alzheimer's disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; AAT42081.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fischer I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9630052-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide
                                                                                                                                                                                                                                                                                 Claim 4; Page 43-45; 87pp; English
                                                                                                                                                                                                                                                                                                                    schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1996-455009/45.
                                                 animal with excessive neural growth in the limbic region, i.e where the animal has epilepsy, Alzheimer's disease or schizophrenia. Neura stem cells transformed with an expression vector comprising one of these nucleic acids, can be used to treat neuropathologies involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UMDJ-) UMDNJ UNIV NEW JERSEYS HEALTH SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Levitt PR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95US-0414657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96WO-US04397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "Mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "Signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pimenta A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zhukareva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   domain;
                                                                                                Neural
```

Sequence 338

51.3%;

DB 17;

Length

338;

4

system.

```
Qγ
                                                                                                                                                                             밁
                                                           밁
                                                                                     Ωy
                                                                                                                   Вþ
                                                                                                                                                                                                       Qy
   В
                          QΥ
                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                       Matches
    195
                                199
                                                                                                                                                                                                                                       Local Similarity hes 179; Conserv
                                                                                                                               79 NDKWCLDPRVVLLSNIQTQYSIEIQNVDVYDEGPYICSVQTDNHPKISRVHLIVQVSPKI 138
                                                                                                                                                                             17
                                                                                                                    75
                                                                                                                                                                                                        20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG
                                                                                                                                                                           yecka a {\tt nevssadvkqvkvtvnypptitesksneattgrqaslkce} as a {\tt vpapdfewyrd}
                YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD
                                                          snissdvtvnegsnvtlvcmangrpepvitwrhltplgrefegeeeyleilgitregsgk 194
                                                                                    VEISSDISINEGNNISLICIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                               hdkwsldprvelekrhaleyslriqkvdvydegsytcsvqtqhepktsqvylivqvppki 134
                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                       60; Mismatches
                                                                                                                                                                                                                                       Score 926.5; DB 1/;
Pred. No. 2.8e-72;
Pred. No. 2.8e-72;
                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                             ن.
                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                      74
                                                                                                                                                                                                                  78
                                       258
          254
```

Fri

Jul

```
RESULT 1
AAW05152
                                                          Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ŷ
Query Match
Best Local Similarity
                                                                                                 The sequences given in AAW05152-70 represent fragments of limbic system associated membrane protein (LAMP) self binding domain. LAMP is a self-binding, antibody-like cell surface adhesion protein, which causes the formation of connections between adjacent neurons. LAMP is bound by the monoclonal antibody 2G9 and is thought to be involved in the growth and differentiation of certain neurons. The protein is highly conserved and the human and rat sequences differ in only four amino acids. LAMP nucleic acids, or soluble LAMP analogues, can be used to treat an animal with excessive neural growth in the limbic region, i.e. where the animal has epilepsy, Alzheimer's disease or schizophrenia. Neural stem cells transformed with an expression vector comprising one of these nucleic acids, can be used to treat neuropathologies involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            limbic system associated membrane protein; LAMP; self binding antibody-like; cell surface adhesion protein; neuron; monoclonal antibody; 269; growth; differentiation; epilepsy;
                                                                                                                                                                                                                                                                                                                                            DNA encoding limbic system associated membrane protein self binding domain - useful in treatment of excessive neural growth in limbic system, e.g. in animal having epilepsy, Alzheimer's disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alzheimer's disease; schizophrenia; neural stem cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human LAMP residues 8-332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW05152 standard;
                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fischer I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9630052-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide
                                                                                                                                                                                                                                                                                                                               schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 259
                                                          Sequence
                                                                                      these nucleic acids, the limbic system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UMDJ-) UMDNJ UNIV NEW JERSEYS HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314 i-ngsislavplwllaaslfcllsk 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      319 VSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dtr-insangleiksteggssltvtnvteehygnytcvaanklgvtnaslvlfrpgsvrg 313
                                                                                                                                                                                                                                                                                                                                                                                                        1996-455009/45.
DB; AAT42079.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DKRLIEGKKGVKVENRPELSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                  4; Page 38-39; 87pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Levitt PR,
                                                          325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95US-0414657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96WO-US04397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Represents residues 8-28 of signal peptide" 22..325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein;
   551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Mature protein"
   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pimenta A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   325
 Score
Pred.
   923.5; DB 17;
No. 4.8e-72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhukareva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCI.
                 Length 325;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 domain;
```

```
RESULT
AAW05172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 177; Conservative
protein (LAMP) self binding comain clone ve. A composition of the san insert of 69 nucleotides between nucletoides 974-975 as compared to wild type LAMP. LAMP is a self-binding, antibody-like cell surface adhesion protein, which causes the formation of connections between adjacent neurons. LAMP is bound by the monoclonal antibody 269 and is thought to be involved in the growth and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antibody-like; cell surface adhesion protein; neuron; monoclonal antibody; 269; growth; differentiation; epilepsy; Alzheimer's disease; schizophrenia; neural stem cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW05172;
                                                                                                                                                                               DNA encoding limbic system associated membrane protein self binding domain - useful in treatment of excessive neural growth in limbic system, e.g. in animal having epilepsy, Alzheimer's disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW05172 standard;
                                                                                                                                      Claim 7;
                                                                                                                                                                                                                                               WPI; 1996-455009/45.
N-PSDB; AAT42116.
                                                                                                                                                                                                                                                                                               Fischer I,
                                                                                                                                                                                                                                                                                                                                                             31-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                            29-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                            03-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09630052-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               limbic system associated membrane protein; LAMP; self binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rat LAMP clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199 YECSASIDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              139 VEISSDISINEGNNISLICIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                    schizophrenia
                                                                                                                                                                                                                                                                                                                            (UMDJ-) UMDNJ UNIV NEW JERSEYS HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79 NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10 lrllcllptglpvrsvd--fnrgtdnitvrggdtailrcvledknskvawlnrsgiifag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         i-ngsislavplwllaasll 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VSNGTSRRAGCVWLLPLLVL 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dtr-insangleiksteggssltvtnvteehygnytcvaanklgvtnaslvlfrpgsvrg 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             yeckaanevssadvkqvkvtvnypptitesksneattgrqaslkceasavpapdfewyrd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            snissdytvnegsnytlycmangrpepvitwrhltptgrefegeeeyleilgitregsgk 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hdkwsldprvelekrhsleyslriqkvdvydegsytcsvqtqhepktsqvylivqvppki 127
                                                                                                  sequence represents the rat limbic system associated membrane
                                                                                       (LAMP) self binding domain clone 6c.
                                                                                                                                      Page 32 and 40-42; 87pp; English.
                                                                                                                                                                                                                                                                                                Levitt PR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                             95US-0414657
                                                                                                                                                                                                                                                                                                                                                                                            96WO-US04397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Protein; 361 AA.
                                                                                                                                                                                                                                                                                                  Pimenta A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                  Zhukareva
                                                                                                                                                                                                                                                                                                                                 SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78;
                                                                                           The cDNA encoding this
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4;
```

```
Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 180;
                                                                                                                                                                                                                                                                           limbic system associated membrane protein; LAMP; self binding antibody-like; cell surface adhesion protein; neuron; monoclonal antibody; 269; growth; differentiation; epilepsy; Alzheimer's disease; schizophrenia; neural stem cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                differentiation of certain neurons. The protein is highly conserved and the human and rat sequences differ in only four amino acids. LAMP nucleic acids, or soluble LAMP analogues, can be used to treat an animal with excessive neural growth in the limbic region, i.e where the animal has epilepsy, Alzheimer's disease or schizophrenia. Neural stem cells transformed with an expression vector comprising one of these nucleic
 (UMDJ-) UMDNJ UNIV NEW JERSEYS
                                31~MAR-1995;
                                                            29-MAR-1996;
                                                                                           03-OCT-1996
                                                                                                                          W09630052-A1
                                                                                                                                                                        Protein
                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                             Human LAMP residues 8-315
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW05157 standard; Protein; 308 AA.
                                                                                                                                                                                                     Peptide
                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acids,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314 phpiqeigttvhfkqkgpgsvrgi-ngsislavplwllaaslfcllsk 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259 DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLF-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  135 snissdvtvnegsnvtlvcmangrpepvitwrhltplgrefegeeeyleilgitreqsgk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139 VEISSDISINEGNNISLTCIATGRPEPTYTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75 hdkwsldprvelekrhaleyslriqkvdvydegsytcsvqtqhepktsqvylivqvppki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 lrllcllptglpvrsvd--fnrgtdnitvrqgdtailrcvvedknskvawlnrsgiifag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79 NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNISTILYAG 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YECSASNDVAAPVVKRVKYTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dtr-insangleikstegqssltvtnvteehygnytcvaanklgvtnaslvlfkrvlptv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     yeck a a nevs sadvkqvkvtvnypp {\tt tites} ks neattgrqas {\tt lkceas} avpapd {\tt fewyrd}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    can be used to treat neuropathologies involving the limbic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361 AA,
                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                              95US-0414657
                                                            96WO-US04397
                                                                                                                                                                    /note=
22..308
                                                                                                                                                                                                       Location/Qualifiers
1..21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -GPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                 "Represents residues 8-28 of signal
                                                                                                                                                 "Represents residues 29-315 of mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 913; DB 17;
Pred. No. 4.5e-71;
HEALTH SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28;
                                                                                                                                                                                                                                                                                                                          domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.
```

```
Q
                                                                             g
                                                                                                                                     γQ
                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                  Ωy
                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequences given in AAW05152-70 represent fragments of limbic system associated membrane protein (LAMP) self binding domain. LAMP is a self-binding, antibody-like cell surface adhesion protein, which causes the formation of connections between adjacent neurons. LAMP is bound by the monoclonal antibody 269 and is thought to be involved in the growth and differentiation of certain neurons. The protein is highly conserved and the human and rat sequences differ in only four amino acids. LAMP nucleic acids, or soluble LAMP analogues, can be used to treat an animal with excessive neural growth in the limbic region, i.e. where the animal has epilepsy, Alzheimer's disease or schizophrenia. Neural stem cells transformed with an expression vector comprising one of these nucleic acids, can be used to treat neuropathologies involving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA encoding limbic system associated membrane protein self domain - useful in treatment of excessive neural growth in system, e.g. in animal having epilepsy, Alzheimer's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; Page 50-52; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-455009/45
                                                                                                                                                                                                                       188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fischer I, Levitt PR,
                                                                             248
                                                                                                       259 DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                128
                                                                                                                                                                                                                                                                                                                                                                                                                        139 VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 lrllcllptglpvrsvd--fnrgtdnitvrggdtailrcvledknskvawlnrsgiifag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG
       VS
                                                               dtr-insangleikstegqssltvtnvteehygnytcvaanklgvtnaslvlfrpgsvrg
                                                                                                                                                                                                                                                                                                                                                         snissdvtvnegsnvtlvcmangrpepvitwrhltptgrefegeeeyleilgitregsgk 187
                                                                                                                                                                                                        yeck a a nev s s a dv k q v k v t v n y p p tites k s neatt g r g a s l k ceas a v p a p d f e w y r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r d v r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                               YECSASINDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hdkwsldprvelekrhsleyslriqkvdvydegsytcsvqtqhepktsqvylivqvppki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT42084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   308 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pimenta A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 908; DB 17; L
Pred. No. 9.9e-71;
Pred. No. 9.9e-71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhukareva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 f binding
n limbic
e or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                      258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  78
                                                                                                                                                                                                               247
```

ω

Search completed: July 12, Job time: 6000 sec 2002, 00:33:37

307

in::

AAI57869 AAZ47894 AAA44536 AAQ51015 AAQ51017

Rat opioid recepto Rat opioid recepto Rat opioid recepto Human EST DNA42301 Human EST DNA42301

Human polynucleoti Human protein enco Human secreted exp

```
Minimum DB
Maximum DB
                                                                                                                                                                                                                               Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                            No.
              400100
                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
            1032
1032
1032
1032
1032
1032
1030.4
1030.4
                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of hits satisfying chosen parameters:
          100
100
100
100
100
100
                                                                                                                                                                                                        Match
                                                                                                                                                                                                                            Query
                                                                                                                                                                                                                                                                                                                                                                                       1: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*
2: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
3: SIDSI/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
4: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*
5: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1984.DAT:*
5: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
6: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
7: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1987.DAT:*
8: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
9: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1999.DAT:*
10: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1999.DAT:*
11: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:*
12: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:*
13: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1993.DAT:*
14: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
15: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
16: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
17: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1996.DAT:*
18: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1996.DAT:*
18: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
19: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
10: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
10: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
11: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
12: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
13: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
14: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
15: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
16: /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1032
1 at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N_Geneseq_032802:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     July 11, 2002, 20:32:12; Search time 435.78 Seconds (without alignments) 4065.941 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1736436 seqs, 858457221 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      us-09-700-397-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atgaaaaccatccagccaaa.....tgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                              /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2000.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2001A.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2001B.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2002.DAT:*
                                                                                                                                                                                                        Length
        1032
1679
1679
1679
1679
1679
1693
1603
2012
                                                                                                                                                                                                          DВ
        21
20
21
22
22
21
21
21
21
22
                           AAZ34324
AAC78590
AAS21431
AAC87037
AAZ47893
AAA88790
AAA88791
                                                                                                                                                                                                        Ħ
        AAI59655
                                                                                                                                                              AAZ47892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3472872
Human cDNA sequenc
Nucleotide sequenc
Human protein enco
Human SECX cDNA C1
Human SECX cDNA C1
Human polynucleoti
                                                                                                              Human protein enco
Human PRO337 nucle
Human PRO337 nucle
                                                                                                                                                                                                 Description
```

AAZ47892 ID AAZ4 RESULT a (ONOY) ONO PHARM CO LTD CDS Homo Human; haematopoietic cell regulation; tissue generation; reparation; activin; inhibin; taxis; chemotaxis; blood coagulation; thrombus; receptor; ligand; autoimmune; infection-related immunodeficiency; inflammatory disorder; neurological disease; ss. 14-MAY-1998; 13-MAY-1999; WO9958668-A1. Human 10-MAR-2000 18-NOV-1999. AAZ47892 standard; cDNA; 1032 AAZ47892; 952 670.89 939 939 938.2 492 362.2 362.2 340.6 340.6 340.6 338.6 338.6 338.6 338.6 338.6 339.6 349.6 34 sapiens protein 3.5.1 3.4.1 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.3.0 3.0.0 (first entry) encoding cDNA SEQ ID NO: 2. 98JP-0131815 99WO-JP02485 /*tag= Location/Qualifiers /note= "no stop codon given" .1032 443 4834 2840 2813 4656 2883 352 22 22 21 17 17 23 23 22 22 23 23 23 23 23 23 23 23 17 17 17 17 17 AAT42094 AAT42095 AAS78034 AAC78596 ABA06475 AAC34325 AAC34325 AAC343591 AAC78591 AAC91321 AAC91321 AAC91321 AAC91321 AAC91321 AAC91321 AAC912089 AAC912089 AAC912089 AAC912089 AAC912089 AAC912089 AAC912089 AAC912089 AAC912089 AAC913116 AAC913116 AAC913116 ВP AAC02777 AAS78003 AAS2881 AAC87055 AAC19214 AAT42088 AAS78037 AAF93597 ALIGNMENTS Human polynucleoti
DNA encoding novel
Human LAMP residue
Human LAMP residue
Rat LAMP coding se
Rat LAMP coding se
Human LAMP residue
Human Mature LAMP
Rat LAMP residues
Rat Mature LAMP co Nucleotide sequenc Human PRO4993 nucl Human cDNA SEQ ID Human immunoglobul Rat LAMP residues
Rat LAMP clone 6c
Spinal cord tissue
Human colon cancer
Human secreted pro
Human LAMP residue DNA encoding novel Human secreted pro Umbilical vein end DNA encoding novel Human LAMP residue DNA encoding novel Rat LAMP residues DNA encoding novel

The

```
prevention and treatment of a broad range of disorders including autoimmune and infection-related immunodeficiency, inflammatory disorders, and neurological diseases. The novel protein is expected of having haematopoietic cell regulatory activity, tissue generation/reparation activity, activin/inhibin activity, taxis/chemotaxis activity, belong the protein activity, activity, activity, activity, taxis/chemotaxis activity, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptides of human origin having cell regulatory, generation, coagulant and other activities -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fukushima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 100.0%;
Local Similarity 100.0%;
Les 1032; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present sequence novel human
                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                           ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tatccaccatacattcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                             tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                      agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagggggactacgag
                                                                                                                                                                                                                                                    ggtagaccagagcctacggttacttggagacacatctctccccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                    atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                             atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                         aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
          tatccaccatacattccagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                        tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000-062298/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4; Page 41; 84pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence encodes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 267 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        quence encodes a specifically claimed nove
n protein can be used in therapeutic drugs
treatment of a broad range of disorders in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shibayama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1032; DB 21;
Pred. No. 6.1e-310;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       270 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Η;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       214 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gs for the including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                  720
                                                                                                                                                                        600
                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
        RESULT
AAZ34324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
  17-MAR-1998
20-MAR-1998
20-MAR-1998
20-MAR-1998
20-MAR-1998
20-MAR-1998
25-MAR-1998
25-MAR-1998
27-MAR-1998
27-MAR-1998
27-MAR-1998
30-MAR-1998
31-MAR-1998
31-MAR-1998
31-MAR-1998
31-MAR-1998
31-MAR-1998
31-MAR-1998
31-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                     12-MAR-1998;
13-MAR-1998;
17-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                11-MAR-1998;
11-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAR-1998;
11-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation; probe; blood coagulation disorder; cancer; cellular adhesion disord
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PRO337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ34324;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ34324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         agactgattgaaggaaaggaggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
98US-0078886.
98US-0078936.
98US-0078936.
98US-0079936.
98US-0079056.
98US-0079068.
98US-0079068.
98US-0079788.
98US-0079788.
98US-007978.
98US-007978.
98US-007978.
98US-007978.
98US-0080105.
98US-0080107.
98US-0080107.
                                                                                                                                                                                                                                                                                                                                                                                      98US-0077791
98US-0078004
                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0077632
98US-0077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US05028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               transmembrane protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ss.
```

disorder;

1020

1020 960 960 900 900 840 840 780

밁 δÃ 밁 QΥ

301

241 301

241 181 181 121 121 61 61

361

361

Qy

뮹

Qу

밁

Qy

DЬ Qy

---**ب**ـــا Matches

Дb

QУ Вġ QΨ 밁 δδ ΔĢ QyDЬ δÃ В Qy

> 601 601

541

541 481 481 421 421

밁

98US-0080328. 98US-0080333. 98US-0080334. 98US-0081049.

Claim

2; Fig 221; 530pp; English

adhesion disorders

```
New secreted and transmembrane polypeptides and their polynucleotides, useful for treating blood coagulation disorders, cancers and cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0081195
98US-0081229
98US-00812817
98US-0081817
98US-0081259
98US-008256
98US-0082767
98US-0082767
98US-0083336
98US-0083336
98US-0083496
98US-0083496
98US-0083554
98US-0083554
98US-0083554
98US-0083554
98US-00844114
98US-00844114
98US-0084637
98US-0084637
98US-0084637
98US-0084633
98US-008583
98US-008583
98US-008583
98US-008583
98US-008583
98US-008583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0081070
98US-0081071
                                                                                                                                    Gurney
                                                                                                                                    Ă,
                                                                                                                                      Yuan
                                                                                                                                    ۲
                                                                                                                                    Baker
                                                                                                                                    ΚP,
                                                                                                                                    Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                  B
                                                                                                      γQ
                                                                                                                                                 밁
                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  XXCCCCCCCCXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes secreted and transmembrane polypeptides and their polynucleotides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generation of antisense sequences. They can also be used to create transgenic animals. The proteins can be used to treat a variety of diseases and disorders, depending on their function. Diseases that may be treated include blood coagulation disorders, cancers and cellular adhesion disorders. They may also be used to raise antibodies. AAZ33891 to AAZ4338, and AAX41685 to AAX41774 represent polynucleotide and column of the companion o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1679
                                                                                                                                                                                        601
                                                                                                                                                                                                                                   674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptide sequence given in the exemplification of the present
                         721
                                                                  794
                                                                                                                                                 734
                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                614
                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                 554
                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                     tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                         tatocaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                               tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                           tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                          agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                        atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                              atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; 432 C; 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8e-310;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1679;
```

22-APR-1998 23-APR-1998 23-APR-1998 27-APR-1998 27-APR-1998 28-APR-1998 29-APR-1998 29-APR-1998 29-APR-1998 29-APR-1998

0; Gaps

0;

15-APR-1998, 15-APR-1998, 15-APR-1998, 21-APR-1998, 21-APR-1998, 22-APR-1998, 22-APR-1998,

09-APR 09-APR-1998; 09-APR-1998; 15-APR-1998;

29 APR-1998 29 APR-1998 29 APR-1998 29 APR-1998 29 APR-1998 30 APR-1998 30 APR-1998 05 MAY-1998 07 MAY-1998 07 MAY-1998 07 MAY-1998 07 MAY-1998 07 MAY-1998 13 MAY-1998 13 MAY-1998 15 MAY-1998 17 MAY-1998 18 MAY-1998 19 MAY-1998 19 MAY-1998 19 MAY-1998 19 MAY-1998 19 MAY-1998 22 MAY-1998 22 MAY-1998 22 MAY-1998 23 MAY-1998 28 MAY-1998 29 MAY-1998 29 MAY-1998 21 MAY-1998 21 MAY-1998 22 MAY-1998 23 MAY-1998 24 MAY-1998

WPI; 1999-551358/46. P-PSDB; AAY41773.

780

853

793 660 600 673 540 480

613

420 493

553

433

300 373

360

180

120 193 60

253

GENENTECH INC. Goddard A,

Qy 망

```
RESULT
ARC78590
ID ARC78590
ID ARC78590
XX ARC7
XX ARC7
XX BAC7
XX Huma
XX Huma
XX Huma
XX Homc
XX Hom
XX Ho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
                                                                                                                                                                                                                                             29-MAR-1999
21-APR-1999
28-APR-1999
14-MAY-1999
23-JUN-1999
26-JUL-1999
26-JUL-1999
02-DEC-1999
02-DEC-1999
16-DEC-1999
30-DEC-1999
30-DEC-1999
30-DEC-1999
30-DEC-1999
30-DEC-1999
30-DEC-1999
30-DEC-1999
30-DEC-1999
30-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200053756-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAC78590 standard; cDNA; 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -MAR-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aacggcacglcgaggagggcaggctgcgtctggctgctgctccttcttggtcttg&acctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         agactgattgaaggaaagggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctgggccacaccaatgccagcatcatgctatttggtccaggcggcgtcagcgagggggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PR0337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      secreted protein; transmembrane protein;
                                                                                                                                                                                                    GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence
                                                                                                                                                                                                                                           ; 2000WO-US00219.
; 2000WO-US00277.
; 2000WO-US00376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleotide sequence SEQ ID NO:522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US04341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                            99WO-US28565.
99WO-US30095.
99WO-US31243.
99WO-US31274.
                                                                                                                                                                                                                                                                                                                                                                                                    99US-0145698.
99US-0162506.
99WO-US28313.
99WO-US28551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S066
S066
S066
S066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -Sn66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US05028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tag; detection; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -0134287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -0131445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -0123957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST;
                                                                                                                                                                                                                                                                                                                                   Mary 1885 . . . . Server
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    973
```

Novel PRO polypeptides and polynucleotides used in detection methods, to target bloactive molecules to specific cells, and to modulate cellular activities -

Claim 2; Fig English.

AAC78458 to AAC78599 represent polynucleotide and EST (expressed sequence tag) sequences which encode secreted or transmembrane PRO polypeptides. The PRO polynucleotides and polypeptides have cytostatic activity. The polynucleotides and polypeptides can be used for detecting the presence of PRO polypeptides in samples, for linking bioactive molecules to cells and for modulating biological activities of cells, using the polypeptides for specific targeting. The polypeptide targeting can be used to kill the target cells, e.g. for the treatment of cancers. The polypeptide pairs provide specific targeting of bioactive molecules to cells. AAC78600 to AAC78987 represent PCR primers and probes used in isolation of the PRO polynucleotide sequences.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 other;

Query Match Best Local S Matches 1032

Local Similarity hes 1032; Conserv

Conservative

0;

Pred. No. 8e; Mismatches Score

8e-310; DВ 21;

0;

Indels

0; Gaps

0,

100.0%;

. 0%;

g QΥ Вb Qy B Ωy Db Qy

B Qy 망 Q 밁 Qy γ В 밁 Qy 먾 Q Ş 밁 Вþ Qy В Qy Дb δÃ D QΥ B V 794 661 tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca 541 614 481 554 494 421 434 301 374 314 241 181 254 194 134 121 61 1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac tgCagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg 99tagarcagagcotacggttacttggagacacatctctcccaaaagcggttggctttgtg atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact 480 aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag 420 aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc 9ctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180 gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 853 793 733 673 613 553 493 433 193 60 360 300 373 240 253

WPI; 20 P-PSDB;

2000-611443/58

AAB44329

Kljavin Shelton

I A,

Godowski PJ, , Kuo SS, Nap , Stewart TA,

: KP, Botstein D, Desnoyers L
if E, Fong S, Gao W, Gerber
i PJ, Grimaldi CJ, Gurney AL,
 Napier MA, Pan J, Paoni NF
t TA, Tumas D, Williams PM,

NF, Roy MA;

Hillan Eaton

Gerritsen

Ě

Desnoyers L, W, Gerber H, Gurney AL,

Ą

Filvaroff E,

```
RESULT
AAS21431
ID AAS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          γ
02-DEC-1999
02-DEC-1999
03-DEC-1999
16-DEC-1999
20-DEC-1999
20-DEC-1999
20-DEC-1999
30-DEC-1999
30-DEC-1999
06-JAN-2000
06-JAN-2000
01-FEB-2000
11-FEB-2000
11-FEB-2000
12-FEB-2000
24-FEB-2000
24-FEB-2000
24-FEB-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
                                                                                                                                                                                                                                              01-DEC-1999;
01-DEC-1999;
02-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                    Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast; prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage; ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte; A-peptide; factor VIIA; gene therapy; ss.
                                                                                                                                                                                                                                                                                              01-DEC-2000;
                                                                                                                                                                                                                                                                                                                    07-JUN-2001
                                                                                                                                                                                                                                                                                                                                             WO200140466-A2
                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                Human cDNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAS21431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS21431 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aacggcacgtcgaggaggcaggctgcgtctggctgctcttctggtctttccacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgggccaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctgggccaccaccaatgccagcatcatgctatttggtccagggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atottottoaatgtototgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atcttcttcaatgtctctgaacatgactatgggaactacactttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agactgattgaaggaaaggaggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg 1153
                                         99WO-US31243.
2000WO-US00277.
2000WO-US00376.
2000WO-US03565.
2000WO-US04341.
2000WO-US04414.
2000WO-US04414.
2000WO-US04414.
2000WO-US05004.
2000WO-US05004.
                                                                                                                                                                                                                                                                                              2000WO-US32678
                                                                                                                                                                                       99WO-US30911
                                                                                                                                                                                                 99WO-US30095
                                                                                                                                                                                                                       99WO-US28564
99WO-US28565
                                                                                                                                                                                                               99US-0170262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                               encoding for PRO337 polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 913
```

```
CC AAS21244-AAS21518 encode for novel human secretory and transmembrane CC PRO polypeptides. The PRO polypeptides are useful to detect other CC PRO polypeptides, to link bioactive molecules to cells expressing CC PRO polypeptides, to modulate biological activities of cells expressing CC PRO polypeptides, and to detect the presence of mammalian lung, colon, CC breast, prostate, rectal, cervical or liver tumours by comparing PRO CC polypeptide expression in a cell sample to that in a control sample. CC some of the 275 sequences are also useful to stimulate the release of CC tumour necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or differentiation of chondrocytes, the proliferation or CC gene expression in pericyte cells, the release of proteoglycans from CC of T-lymphocytes, the release of a cytokine from peripheral blood CC monocytes (PBMCS), or the proliferation of endothelial cells. Some of CC the PRO polypeptides may modulate glucose or free fatty acid uptake by CC skeletal muscle cells or by adipocytes; or inhibit binding of A-peptide CC to factor VIIA. The PRO polypeptides can be used in assays to identify CC molecules involved in binding interactions. The polynucleotides encoding CC PRO polypeptides can be used to generate probes, antisense RNA/DNA, CC transgenic or knock out animals and can be used in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerritsen Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Isolated, secretory and transmembrane PRO polypeptide used to detect other PRO polypeptides, link bloactive molecules to cells expressing PRO polypeptides, and detect the presence of mammalian tumours e.g. lung, breast, prostate, cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAY-2000; 2000WO-US14941.
02-JUN-2000; 2000WO-US15264.
10-NOV-2000; 2000WO-US30873.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 3; Fig 375; 813pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-408281/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΜE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beresini M,
ME, Goddard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Deforge L, Desnoyers L, Filvar
A, Godowski PJ, Gurney AL, She
Tumas D, Watanabe CK, Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Filvaroff E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherwood S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Į.
```

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 other;

```
멍
                                    Ωy
                                                           밁
                                                                           Qy
                                                                                                  Db
                                                                                                                      Š
                                                                                                                                          밁
                                                                                                                                                             Qy
                                                                                                                                                                                   В
                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                             멇
                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
361
                  434
                                       301
                                                           374
                                                                              241
                                                                                                  314
                                                                                                                                                                                                                      181
                                                                                                                                           254
                                                                                                                                                              121
                                                                                                                                                                                   194
                                                                                                                                                                                                        61
               aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                          aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                        gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                  gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                           gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                       aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                 Score 1032; DB 22
Pred. No. 8e-310;
; Mismatches 0;
                                                                                                                                                                                                                                                                                      DB 22;
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                      Length 1679;
                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                  Gaps
                                                        433
                                                                                                373
                                                                                                                                                             180
                                                                                                                                                                                                      120
                                                                                                                                                                                                                          193
                                                                                                                                                                                                                                               60
                                                                            300
                                                                                                                   240
                                                                                                                                        313
                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                    0
```

aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag

```
RESULT
AAC87037
    Дb
                                                                                                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   УŠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              рь
                                                                                                                                        Human; secreted protein; transmembrane protein; pR0196; pR0444; pR0183; pR0185; pR01216; pR0217; pR0288; pR0365; pR01361; pR01308; pR01183; pR01272; pR01419; pR04999; pR07170; pR02489; pR0353; pR01318; pR01600; pR09940; pR0533; pR0301; pR0187; pR0337; pR01411; pR04356; pR0246; pR0255; pR0941; pR01096; pR06003; pR06004; pR0350; pR02630;
                                                                                                                                                                                                                                                                                                                                                                                               1154
               sig_peptide
                                                                                                                                                                                                                                Nucleotide sequence of human polypeptide PRO337.
                                                                                         Homo sapiens
                                                                                                                                  PRO6309;
                                                                                                                                                                                                                                                                 20-APR-2001
                                                                                                                                                                                                                                                                                                                        AAC87037 standard; cDNA; 1679
                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              494
                                                                                                                                                                                                                                                                                                                                                   G
                                                                                                                                                                                                                                                                                                                                                                                             cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atcttcttcaatgtctctgaacatgactatgggaactacactttgcgtggcctcqaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ctgggccacaccaatgccagcatcatgctatttggtccaggcgcgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagtaaaggtcaccgtgaac 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact 480
                                                                                                                                                                                                                                                                                                                                                                                                                         cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                               aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tgcagtgcctccaatgacgtggccgccgcgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaact 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                  cell death;
                                                                                                                                                                                                                                                                (first entry)
Location/Qualifiers
134.1168
/*tag= a
134.216
/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                             1165
                                                                                                                               genetic disorder; transgenic animal;
                                                                                                                                                                                                                                                                                                                      ВP
                                     وَلِيْفِنْ .
                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           553
```

```
01-SEP-1999

08-SEP-1999

15-SEP-1999

15-SEP-1999

10-DEC-1999

01-DEC-1999

07-DEC-1999

07-DE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUN-1999;
20-JUL-1999;
26-JUL-1999;
17-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GETH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200077037-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-may-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US28565.
99US-0169495.
2000WO-US00219.
2000WO-US04341.
2000WO-US04342.
2000WO-US04414.
2000WO-US05601.
2000WO-US05841.
2000WO-US07377.
2000WO-US07377.
2000WO-US033358.
2000WO-US033358.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000WO-US14042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US20594.
99WO-US21090.
99WO-US21547.
99WO-US28313.
99WO-US28301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US20111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-0145698.
99US-0149396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0145070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0139695
```

_

Ashkena.
Ferrara N., Gur.
Godowski PJ, Gur.
Godowski PJ, Gur.
Toni NF, Roy MA, S J, Baker KP, Botstein DA, Fong S, Gao W, Gerber H, Gurney AL, Kijavin IJ, Roy MA, Stewart TA, Tumas Desnoyers L, Eaton
 Gerritsen ME, Godd
 Mather JP, Napier N
 S D, Watanabe CK, Wi Eaton DL; Goddard r MA, Pan Williams 1 MA, A; n J;

P-PSDB; AAB31204. 2001-050091/06

Isolated nucleic acid molecule encoding a PRO polypeptide which is a transmembrane polypeptide is useful for gene therapy and identification related polypeptides -

Claim 2; Fig 51; 244pp; English.

The present sequence encodes a human secreted and transmembrane plypeptide. The specification describes human polypeptides, designated PRO196, PRO444, PRO183, PRO185, PRO210, PRO215, PRO217, PRO218, PRO288, PRO365, PRO1361, PRO1308, PRO1183, PRO1172, PRO11419, PRO4999, PRO7170, PRO2464, PRO353, PRO1318, PRO1600, PRO9940, PRO533, PRO3011, PRO187, PRO3014, PRO353, PRO1411, PRO4356, PRO266, PRO50603, PRO1404, PRO580, PRO5803 and PRO6003, PRO9941, PRO100966, PRO6003, PRO6004, PRO580, PRO5803 and PRO6003, The biological activity of cells can be modulated with agents that bind to these polypeptides, resulting in the death of the cells. The polynucleotides encoding these polypeptides are useful in the recombinant production of the polypeptides, as a hybridisation probe to screen libraries to isolate homologous sequences, or to map the gene. They may also be used for analysing genetic disorders, and to produce transgenic animals which are useful for the development and screening of therapeutically useful reagents. The polynucleotides can also be used in gene therapy e.g. to replace a defective gene.

Sequence 1679 BP; 498 A; 432 ü 419 9 330 7; 0 other;

```
QΥ
                                    Matches 1032;
                                             Query Match
Best Local
              ببر
atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 60
                                             Similarity
                                 100.0%; ilarity 100.0%; Conservative
                                 0;
                                Score 1032; DB 22
Pred. No. 8e-310;
; Mismatches 0;
                                                      22;
                                 Indels
                                                      Length
                                                       1679
                                 0;
                                Gaps
```

0;

```
Qy
                                                                                                                               δÃ
                                                                                                                                                            밁
                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                         Qy
밁
                        QΥ
                                                    B
                                                                                                        밁
                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                 Ωy
                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                  ΔĞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
1154
                                                                                                         1034
                                                                                                                                   901
                                                                                                                                                              974
                                                                                                                                                                                       841
                                                                                                                                                                                                                  914
                                                                                                                                                                                                                                                                      854
                                                                                                                                                                                                                                                                                                                          794
                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                               734
                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                   674
                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           314
                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                         cttctcaaattt 1032
                                                              aacggcacgtcgaggagggcaggctgcgtctggctgctcttctggtcttctgcacctg 1020
                                                                                                                   ctgggccacaccaatgccagcatcatgctatttggtccaggcgcgtcagcgaggtgagc
                                                                                                                                                     atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                     atcttcttcaatgtctctgaacatgactatgggaactacactttgcgtggcctccaacag
                                                                                                                                                                                                               agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                          agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                               ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                  ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                    ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                    tatccaccatacatttcagaagccaagggtaccaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                         tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                      tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                          tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                     1093
                                                                                                                                                         1033
                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                               973
                                                                                                                                                                                                                                                                  913
                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                      853
                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                          793
                                                                                                                                                                                                                                                                                                                                                                                                                               733
                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373
```

RESULT AAZ47893

6

```
Q
                                           밁
                                                                  Qγ
                                                                                           밁
                                                                                                               Qγ
                                                                                                                                             В
                                                                                                                                                                   δÃ
                                                                                                                                                                                              망
                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
                                                                                                                                                                                                                                             Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                          disorders, and neurological diseases. The novel protein is expected having haematopoietic cell regulatory activity, tissue generation/reparation activity, activin/inhibin activity, taxis/chemotaxis activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptides of human coagulant and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      activin; inhibin; taxis; chemotaxis; blood coagulation; thrombus; receptor; ligand; autoimmune; infection-related immunodeficiency; inflammatory disorder; neurological disease; ss.
                                                                                                                                                                                                                                                                                                         Sequence 1693 BP; 518 A; 432 C;
                                                                                                                                                                                                                                                                                                                                blood coagulation and thrombus activity, and receptor/ligand activity.
                                                                                                                                                                                                                                                                                                                                                                                              prevention and
                                                                                                                                                                                                                                                                                                                                                                                                           The
The
                   241
                                           310
                                                                                                                                                                                                                                                                                                                                                                                   autoimmune and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fukushima D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ONOY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9958668-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ47893 standard;
                                                                                           250
                                                                                                                    121
                                                                  181
                                                                                                                                             190
                                                                                                                                                                                              130
                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                    61
                                                                                                                                                                                                      1 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                             present sequence encodes a specifically claimed novel human protein can be used in therapeutic drugs for the novel human protein can be used in therapeutic drugs for the vention and treatment of a broad range of disorders including oimmune and infection related immunodeficiency, inflammatory
aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                    aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                  aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                    gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                    gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                       gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                      gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                         atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000-062298/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                5; Page 42-45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             haematopoietic cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY57601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ONO PHARM CO
                                                                                                                                                                                                                                           100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shibayama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      encoding cDNA SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98JP-0131815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-JP02485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers 214..1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                            84pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     origin having cell regulatory, tissue other activities -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              regulation;
                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                           Score 1032; DB 2
Pred. No. 8e-310;
Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В₽
                                                                                                                                                                                                                                                                                                        416 G; 327 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO:3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tissue generation;
                                                                                                                                                                                                                                                                  ; 21;
                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                        other;
                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           reparation;
                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                           activity,
                                                                                                                 180
                                                                                                                                                                  120
                                                                                                                                                                                          189
               300
                                                                                        309
                                                                                                                                          249
                                                                                                                                                                                                                   60
```

O.f

```
RRESULT
AAAB8790
ID AAA8
XX AAA8
XX AAA8
XX I9-F
DT 19-F
DX HUMA
XX SECX
XX SECX
XX SECX
XX HOMO
XX HOMO
XX CDS
FT CDS
FT Sig_
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                              Q_{\mathbf{y}}
                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                  Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     бÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                 Homo
                                                                                                                                                                                                                                                                      1150
sig_peptide
                                                                                         SECX; human;
                                                                                                                                               19-FEB-2001
                                                                                                                                                                         AAA88790
                                                                                                                                                                                                                                                                                             1021 cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                          1090
                                                                                                                                                                                                   AAA88790 standard; cDNA; 1603
                                                                                                                                                                                                                                                                                                                                                                               1030
                                                                                                                                                                                                                                                                                                                                                                                                                                  970
                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            370
                                                                                                                                                                                                                               7
                                                                sapiens
                                                                                                                                                                                                                                                                                                                                aacggcacgtcgaggagggcaggctgcgtctggctgctgcttcttctggtcttqcacctg
                                                                                                                                                                                                                                                                                                                                                                                     ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                         atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agactgattgaaggaaaggaggtgaaagtggaaaacagacctttcctctaaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact 480
                                                                                                                                                                                                                                                                     cttctcaaattt 1161
                                                                                                                                                                                                                                                                                                                   aacggcacgtcgaggagggcaggctgcgtctggctgctctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                      ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                           atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagtaaaggtcaccgtgaac 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaaet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaatbgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                   SECX cDNA Clone 11753149.0.6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gagateceagaacgtggatgtgtatgacgagggeeettacacetgeteggtgcagacagae
                                                                                        diagnosis; gene therapy;
                                                                                                                                               (first entry)
Location/Qualifiers
92..1126
/*tag= a
92..190
                                                                                                                                                                                                   ВP
                                                                                       cell adhesion;
                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                        1089
                                                                                                                                                                                                                                                                                                                                                                                                                            1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       429
```

```
g
                                                                          Qγ
                                                                                                        В
                                                                                                                                  Ŋ,
                                                                                                                                                                 멍
                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                         Db
                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Sir
Matches 1031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence is that of SECX Clone 11753149.0.6, which resembles rat neural cell adhesion molecule neurotrimin and human opioid binding protein/cell adhesion molecule OBCAM. The clone was initially identified in human foetal brain tissue. The invention provides novel SECX polynucleotides (see AAA88789-804) and the secreted or membrane-associated proteins encoded by them (see AAB19720-34). SECX polynucleotides, polypeptides and antibodies can be used in the detection, diagnosis and treatment (including gene therapy) of a broad range of pathological states.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SECX polypeptides and the nucleic acids that encode them, useful for diagnosing, preventing and treating e.g. cancers, inflammation, arthritis and immunological disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1603 BP; 466 A; 422 C; 405 G; 310 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 14; Fig 2; 143pp; English.
                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB; AAB19721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-APR-1999;
                                                  452
                                                                                                                                                                 332
                                                                                                                                                                                                                         272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fernandez E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-MAR-2000; 2000US-0128514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000WO-US09392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mat_peptide
                                                                                                        392
                                                                                                                                     301
                                                                                                                                                                                            241
                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                212
                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                         152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CURA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200061754-A2
                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                 92
                                                                                                                                                                                                                                                                                                                                                                                                                             ш
atttottcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                        aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                          aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                       atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
                                                                                                                                                                                                                 aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                         gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                         gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                               9ctgctctgtgtctctttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                         atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                 aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000-679487/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURAGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vernet C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0128514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= b
191..1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shimkets
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1030.4; DB 2
Pred. No. 2.4e-309;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1603;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
```

0;

480 511

B

512

```
RESULT
AAA88791
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                               γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Βb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        먽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                              Key
                                                                                                                                                                                                                                                                                                                                                       1112
03-MAR-2000;
          09-APR-1999;
                             07-APR-2000; 2000WO-US09392
                                                   19-OCT-2000
                                                                         WO200061754-A2
                                                                                                        mat_peptide
                                                                                                                            sig_peptide
                                                                                                                                                     CDS
                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                    19-FEB-2001
                                                                                                                                                                                                                                                                           AAA88791;
                                                                                                                                                                                                                                                                                               AAA88791 standard;
                                                                                                                                                                                                                                                                                                                                                                                                  1052
                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                             992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                     ω
                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                      cttctcaaattt 1123
                                                                                                                                                                                                                                                                                                                                                                                            aacggcacgtcgaggagggcaggctgcgtctggctgccgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                         aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctgggcacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          agactgattgaaggaaaggaggtgaaagtggaaaacagacctttcctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tatocaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tgcagtgcctccaatgacgtggccgcgccgctggtaccggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactàcgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                         human;
                                                                                                                                                                                                                              SECX cDNA Clone 11753149.0.37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
2000US-0128514
                                                                                                                                                                                                        diagnosis; gene therapy;
                                                                                                                                                                                                                                                    (first entry)
          99US-0128514
                                                                                                       /*tag= b
600..1532
                                                                                                                           /*tag=_a
501..599
                                                                                          /*tag=
                                                                                                                                                   501..1535
                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                               cDNA;
                                                                                                                                         þ
                                                                                                                                                                                                                                                                                               2012
                                                                                                                                                                                                                                                                                               Ψ
                                                                                                                                                                                                        cell adhesion;
                                                                                                                                                                                                       ss.
                                                                                                                                                                                                                                                                                                                                                                                              1111
                                                                                                                                                                                                                                                                                                                                                                                                                                          1051
                                                                                                                                                                                                                                                                                                                                                                                                                    1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
```

```
δÃ.
                              B
                                                       ΩV
                                                                                     밁
                                                                                                               Qγ
                                                                                                                                                                                                                      Matches 1031;
                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                        The present sequence is that of SECX Clone 11753149.0.37, which resembles rat neural cell adhesion molecule neurotrimin and human opioid binding protein/cell adhesion molecule OBCAM. The clone was initially identified in human foetal brain tissue. The invention provides novel SECX polynucleotides (see AAA88789-804) and the secreted or membrane-associated proteins encoded by them (see AAB19720-34). SECX polynucleotides, polypeptides and antibodies can be used in the detection, diagnosis and treatment (including gene therapy) of a broad range of pathological states.
                                                                                                                                                                                                                                                                                                                                                                                                                      SECX polypeptides and the nucleic acids that encod diagnosing, preventing and treating e.g. cancers, arthritis and immunological disorders -
                                                                                                                                                                                                                Sequence 2012 BP; 567 A; 503 C; 512 G; 430 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                        Claim 14; Fig 3; 143pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P-PSDB; AAB19722.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fernandez E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CURA-) CURAGEN CORP
                              561
 121
                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000-679487/66.
                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vernet
                                                                                                                                                      99.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shimkets
                                                                                                                                           0;
                                                                                                                                                         Score
Pred.
                                                                                                                                           Mismatches
                                                                                                                                                       No. 2.8
                                                                                                                                                                                                                                                                                                                                                                                                                                  that encode them, useful for . cancers, inflammation,
                                                                                                                                                         8e-309;
                                                                                                                                                                     DB
                                                                                                                                                                     21;
                                                                                                                                           Indels
                                                                                                                                                                     Length
                                                                                                                                                                      2012;
                                                                                                                                          0;
```

```
δõ
                                                   В
                                                                                                         B
                                                                            δã
                                                                                                                                    Q
                                                                                                                                                                   ₽
                                                                                                                                                                                           Q
                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                       Ър
                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                           DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                   1041
                      601
                                                                                                          981
                                                                                                                                       481
                                                                                                                                                                    921
                                                                                                                                                                                                421
                                                                                                                                                                                                                             861
                                                                                                                                                                                                                                                                                       801
                                                                                                                                                                                                                                                                                                                                               741
                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                          681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             501 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 algananccalccagccananatgoncantictatetettgggcnatetttcacggggctg
tgcagtgcctccaatgacgtggccgccgcgctggtacggagagtaaaggtcaccgtgaac
                                          agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                   ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                    99tagaccagagcctacggttacttggagacacatctctcccaaagcggtttggctttgtg
                                                                                                                                                              atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                              atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                      aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                  aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                   aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                       aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                           aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                 aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                  660
                                                                                                      1040
                                                                                                                                                              980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                 540
                                                                                                                                                                                             480
                                                                                                                                                                                                                          920
                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                  860
                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                            800
                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                     740
                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                               680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  560
```

```
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                            AAI59655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                          03-AUG-2000;
14-SEP-2000;
19-OCT-2000;
29-NOV-2000;
                               Wang
Zhao
                                                   Tang
                                                                                                                                               25-APR-2000;
09-JUL-2000;
                                                                                                                                                                                                                                                                                            Human; nootropic; immunosuppressant; cytostatic; gene therapy; cance peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
P-PSDB; AAM40499
        WPI; 2001-442253/47
                                                                                                                                                                     21-JAN-2000;
                                                                                                                                                                                                                                                                                     chemokinetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1461
                                                                        (HYSE-)
                                                                                                                                      19-JUL-2000;
                                                                                                                                                                                         26-DEC-2000; 2000WO-US34263
                                                                                                                                                                                                              26-JUL-2001
                                                                                                                                                                                                                                   WO200153312-A1
                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                       22-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                 AAI59655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                             YT,
QA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cttctcaaattt 1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aacggcacgtcgaggagggcaggctgcgtctggctgcttcttcttgttcttgcacctt 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgggccaccactgccagcatcatgctatttggtccaggcgccgtcagcga§gt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atcttcttcaatgtctctgaacatgactatgggaactacactttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctgcagtgtgaagcctcagcagtcccctcagcagatttccagtggtacaaggätgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgcgccgtggtacggaggtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                  polynucleotide SEQ ID NO
                                                                        HYSEQ
                            Liu C,
Wang Z,
Zhou P,
                                                                                                                                                                                                                                                                                                                                                                                                                 standard;
                                                                                          ; 2000US-0620312.
; 2000US-0653450.
; 2000US-0662191.
; 2000US-0693036.
; 2000US-0727344.
                                                                        INC.
                                                                                                                                               2000US-0552317.
2000US-0598042.
                                                                                                                                                                     2000US-0488725
                                                                                                                                                                                                                                                                                     thrombolytic;
                                       Asundi V,
Wehrman T,
                                       Wehrman
                             Goodrich R,
                                                                                                                                                                                                                                                                                                                                                                                                                 cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                 1690
                                                                                                                                                                                                                                                                                    drug
                                                   Chen
                                      Chen R,
Xu C,
                                                                                                                                                                                                                                                                                                                                                  3644
                             Drmanac
                                                                                                                                                                                                                                                                                    screening; arthritis; inflammation;
                           , Ma Y,
Xue AJ,
anac RT;
                                    Qian >
Yang
                                    gΥ,
                                   Ren F,
Zhang
            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gtgagc
                                    ۲.
                                              Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                               ņ
```

Novel nucleic acids and polypeptides, useful for treating disorders such as central nervous system injuries -

IJ NO 3644; 10078pp; English.

The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activiny, inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and C. N. S. dispreters specification. .N.Ŝ disorders. ote: The sequence data for this patent did not form part of the printed

Sequence 1690 BP; 482 A; 416 c; 425 G; 367 Ţ, 0 other;

Matches 1031; Query Match Best Local

Conservative

0;

Local Similarity

96.7%; 99.7%;

Score 998; DB 22; Pred. No. 2.9e-299;

Length 1690; Indels

ω, Gaps

ω

```
Qy
          밁
                                                              밁
                                                                                      QY
                                                                                                                   밁
                                                                                                                                           QΥ
                                                                                                                                                                          Db
                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                              1014
                                  601
                                                                                                                   954
                                                                                                                                               481
                                                                                                                                                                          894
                                                                                                                                                                                                      421
                                                                                                                                                                                                                                  834
                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                       774
                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                             714
                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                    654
                                                                                                                                                                                                                                                                                                                                                                                                                                                         594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     474
                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
tgcagtgcctccaatgacgtgggccgcgcccgtgggtacggagagtaaaggtcaccgtga
               tgcagtgcctccaatgacgt-ggccgcgcccgt-ggtacggagagtaaaggtcaccgtga
                                                       agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                     agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                     atttottcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                               ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                              ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                     atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                            aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                          aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                   aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                    aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                              aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                           aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                  gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                              658
                                                                                     600
                                                                                                               1013
                                                                                                                                                                                                   480
                                                         1073
                                                                                                                                           540
                                                                                                                                                                      953
                                                                                                                                                                                                                             893
                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                    833
                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                        773
                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                     653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
```

```
RESULT 1
Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ.
                                                                                                      19-JUL-2000;
03-AUG-2000;
14-SEP-2000;
19-OCT-2000;
29-NOV-2000;
                                                                                                                                                           21-JAN-2000;
25-APR-2000;
09-JUL-2000;
                                        Wang
Zhao
         P-PSDB; AAM38713
                                                                                                                                                                                                     26-DEC-2000;
                                                                                                                                                                                                                                                                                                  peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1134
                                                                                 (HYSE-)
                                                                                                                                                                                                                            26-JUL-2001
                                                                                                                                                                                                                                                  WO200153312-A1
                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                Human;
                                                                                                                                                                                                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAI57869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1493 tgcttctcaaattt 1506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1194
                                                                                                                                                                                                                                                                                                                                                                                         22-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1254
                                                                                                                                                                                                                                                                                            leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  719
                                                                                                                                                                                                                                                                                                                                                                                                                                                        10
                                       J,
QA,
                    2001-442253/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgcacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | aaagactgattgaaggaaaggaaggggtgaaagtggaaaacagaacctttcctctcaaaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                actatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tgcttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         agctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaagactgatt-aaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    actatecaecatacattteagaageeaagggtaeaggtgteeeegtgggaeaaaagggga
                                                                                                                                                                                                                                                                                                                                                                   polynucleotide SEQ ID
                                                                                                                                                                                                                                                                                                                                 nootropic; immunosuppressant; cytostatic; gene therapy; eral nervous system; neuropathy; central nervous system;
                                      Liu C,
Wang Z,
Zhou P,
                                                                                   HYSEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; cDNA; 1678
                                                                                                                                                                                                                                                                                           SS
                                                                                                      ; 2000US-0488725.

2000US-0552317.

2000US-0558042.

2000US-0620312.

2000US-0623450.

2000US-0662191.

2000US-053036.

2000US-0727344.
                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                       2000WO-US34263.
                                                                                   INC
                                                  Asundi V,
Wehrman T,
                                        Goodrich R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1032
                                                                                                                                                                                                                                                                                                                                                                                         entry)
                                                Chen R, Ma
Xu C, Xue
                                                                                                                                                                                                                                                                                                                                                                   NO 72.
                                                                                                                                                                                                                                                                                                                                                                                                                                  ΒP
                                        Drmanac
                                  Ma Y,
Xue AJ,
c RT;
                                                Qian XB,
Yang Y,
                                                Ren F,
Zhang
                                                                                                                                                                                                                                                                                                                                                                                                                                   A. ...
                                                ü
                                                                                                                                                                                                                                                                                                                                  cancer;
                                                          Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     838
                                                          Ď
```

Novel nucleic acids and polypeptides, u such as central nervous system injuries useful for treating disorders

Claim 1; SEQ ID NO 72; 10078pp; English

system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, Note: The sequence data for this patent did not form specification. assays for receptor activity, arthritis and inflammation, leukaemias and C.N.S disorders. of The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are u gene therapy. A composition containing a polypeptide or polynucleotide the invention may be used to treat diseases of the peripheral nervous part of the printed polynucleotide

Sequence 1678 BP; 420 A; 468 ç; 451 6 339 ₽. 0 other;

Query Match
Best Local Sin
Matches 952;

Similarity

92.2%; 100.0%;

Score 952; Pred. No. !

5.7e-285; DB

22;

Length

Conservative

0;

Mismatches

0;

Indels

0;

Gaps

0;

맑 Qy 뮍 Qγ g Š 밁 Qy 뭥 Qy 밁 Qy 밁 δÃ Db Qy В Ωy 밁 Ω В QΥ 822 189 762 621 702 561 642 501 582 441 522 462 402 342 222 381 321 261 201 282 141 81 aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140 agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt 99009090009199tac99a9a9taaag9tcaccgtgaactatccaccatacatttcaga aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg | ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcaccccgggtggc 200 ggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 320 aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 281 ccggcagggggagagccccccccaggtgcactattgacaaccgggtcacccgggtggc 641 440 881 821 680 560 500 521 380 461 401 761 701 581 341

```
RESULT
AAZ47894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
        The present sequence encodes a specifically claimed novel human protein the novel human protein can be used in therapeutic drugs for the prevention and treatment of a broad range of disorders including autoimmune and infection-related immunodeficiency, inflammatory disorders, and neurological diseases. The novel protein is expected of having haematopoietic cell regulatory activity, tissue generation/reparation activity, activity, inhibin activity, taxis/chemotaxis activity blood coagulation and thrombus activity, and receptor/ligad activity.
                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; haematopoietic cell regulation; tissue generation; reparation; activin; inhibin; taxis; chemotaxis; blood coagulation; thrombus; receptor; ligand; autoimmune; infection related immunodeficiency;
 Sequence 939 BP; 245 A;
                                                                                                                                  Claim 4; Page 48;
                                                                                                                                                         New polypeptides of human generation, coagulant and
                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo
                                                                                                                                                                                                                                   Fukushima
                                                                                                                                                                                                                                                          (ONOY ) ONO PHARM CO
                                                                                                                                                                                                                                                                                    14-MAY-1998;
                                                                                                                                                                                                                                                                                                          13-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                          W09958668-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1122 aggotgogtotggotgcotcttctggtottgcacctgcttctcaaattt 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1002
                                                                                                                                                                                                                                                                                                                                  18-NOV-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ47894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ47894 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aggctgcgtotggctgcttcttcttggtcttgcacctgcttctcaaattt (1032
                                                                                                                                                                                                          2000-062298/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             catcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           catcatgctatttggtccaggcgccgtcagcgaggtgagcaqcggcacgtcgaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcttcaatgtcttctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                                                                                                                               AAY57602
                                                                                                                                                                                                                                   Ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                 Shibayama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encoding
                                                                                                                                                                                                                                                                                   98JP-0131815
                                                                                                                                                                                                                                                                                                        99WO-JP02485
                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
1..939
                                                                                                                                                                                                                                                                                                                                                                                  /note=
                                                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                                 84pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDNA;
                                                                                                                                                                                                                                                          LTD
                                                                                                                                                                                                                                                                                                                                                                               "no stop codon given"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    neurological disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA
                                                                                                                                                                                                                                 ŝ
 255 C;
                                                                                                                                                                                                                                                                                                                                                                                               b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         939
                                                                                                                                                         origin having cell regulatory, other activities -
                                                                                                                                                                                                                                  Tada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
249 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NO:5
 190
<u>ب</u>
0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SS
                                                                                                                                                                     tissue
                              activity,
                                                                                                       protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      800
```

```
Qy
                                                      망
                                                                          Ş
                                                                                                         밁
                                                                                                                                                                                 Qy
     Д
                                                                                                                               γQ
                                                                                                                                                           밁
                                                                                                                                                                                                            В
                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                                                                    δÃ.
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 939; Conserv
     901
                             994
                                                      841
                                                                              934
                                                                                                         781
                                                                                                                                 874
                                                                                                                                                         721
                                                                                                                                                                                   814
                                                                                                                                                                                                            661
                                                                                                                                                                                                                                      754
                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                      694
                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                         634
                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                           574
                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                             514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 بر
cgcagcggagatgccaccttccccaaagctatggacaacgtgacggtccggcagggggag
                                                 ggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctgg
                                                              aactacacttgcgtggcctccaacaagctgggccacaccaatgccagcatcatgctattt
                                                                                                                 aactacacttgcgtggcctccaacaagctgggccacaccaatgccagcatcatgctattt
                                                                                                                                                     gaaaacagacctttcctctaaaactcatcttcttcaatgtctctgaacatgactatggg
                                                                                                                                                                   gaaaacagacctttcctctcaaaactcatcttcttcaatgtctcttgaacatgactatggg
                                                                                                                                                                                                                      ggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccctcagca
                                                                                                                                                                                                                                                                       99tgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccctcagca
                                                                                                                                                                                                                                                                                                           gtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagggtaca
                                                                                                                                                                                                                                                                                                                                                                           acccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgccgccctt
                                                                                                                                                                                                                                                                                                                                                                                                             atototocoaaagoggitggotttgtgagtgaagaogaataottggaaattoagggoato
                                                                                                                                                                                                                                                                                                                                                                                                                              atctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcagggcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccttacacctgctcggtgcagacagacaaccaaccaaagacctctagggtccacctcatt
                                                                                                                                                                                                        gaattccagtggtacaaggatgacaaaagactgattgaaggaaaggaaaggggtgaaagtg
                                                                                                                                                                                                                                                                                                                         gtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagggtaca
                                                                                                                                                                                                                                                                                                                                                               acccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgcgccgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aatattagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aatattagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaagggaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacgagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          agcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtccttctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agcaccatcctctatgctgggaatgacaagtggtgcctgggatcctcgcgtggtccttctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agggccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggctaaaccgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cgcagcggagatgccaccttccccaaagctatggacaacgtgacggtccggcagggggag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaagggaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccttacacctgctcggtgcagacagacaaccacccaaagacctctagggtccacctcatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacgagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agcgccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggctaaaccgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91.0%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 939; DB 21;
Pred. No. 4.5e-281;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                         1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          939;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                  900
                                                                            993
                                                                                                     840
                                                                                                                               933
                                                                                                                                                       780
                                                                                                                                                                                873
                                                                                                                                                                                                          720
                                                                                                                                                                                                                                  813
                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                      693
                                                                                                                                                                                                                                                                                                                                                                                          633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                    753
                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                          573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      153
```

AAA44536

0;

```
CC chemokinetic; proliferative; immunomodulatory; haematopoletic; chemokinetic; analgesic; haemostatic; thrombulytic; antiinflammatory; cc cytostatic; antibacterial; antifungal; antiviral; antidiabetic; cc antiasthmatic; vulnerary; antilucer; osteopathic; neuroprotective; cc antiasthmatic; vulnerary; antilucer; osteopathic; neuroprotective; cc anticonvulsant; and antidepressant. The sESTs can be used for gene cc therapy and in vaccines. The sESTs are useful as probes for the cc therapy and in vaccines. The sESTs are useful as probes for the cc identification and isolation of full-length cDNAs and genomic DNA cc molecules which correspond to the sESTs. Proteins encoded by the sESTs care useful in assays for determining biological activity and raising cc are useful in assays for determining biological activity and raising cc antibodies. They may be useful for treatment of autoimmune disorders (multiple sclerosis insulin dependent diabetes), allergic conditions. CC (asthma), myeloid or lymphoid cell deficiencies, wounds, burns, ulcers, costoorers (nathmators, osteoarthritis, central nervous system disorders (Alzheimer's, Parkinson's, Huntington's disease, stroke), coagulation cc disease), tumours, bacterial, fungal or viral infections, depression and cc psoriasis. AAA45926 to AAA4931 represent linker variants which are given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA43426 to AAA45925 represent specifically claimed secreted expressed sequence tags (sESTs), isolated from human, mouse, chicken and rat tissue sources. The sESTs can have a range of activities depending on the tissues they were isolated from. The activities include:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Isolated polynucleotides, and encoded proteins, comprising secreted expressed sequence tags (SESTs), useful for treating various disorders such as autoimmune, infectious, and central nervous system disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cerebroprotective; anticonvulsant; antidepressant; gene therapy; vaccine; autoimmune disorder; multiple sclerosis; allergic condition; insulin dependent diabetes; asthma; myeloid cell deficiency; ulcer; lymphoid cell deficiency; burn; osteoporosis; osteoarthritis; central nervous system disorder; Alzheiner's disease; stroke; Parkinson's disease; Huntington's disease; coagulation disorder; haemophilia; thrombosis; inflammatory disorder; Crohn's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W0200021991-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiulcer; osteopathic; neuroprotective; nootropic; antipsoriatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiviral; antidiabetic; antiasthmatic; vulnerary; antiparkinsonian;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jacobs K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GEMY ) GENETICS INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tumour; infection; depression; psoriasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  thrombolytic; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expressed sequence tag; EST; probe; chemotactic; immunomodulatory; haematopoietic; chemokinetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human secreted expressed sequence tag SEQ ID NO:1111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA44536 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mouse; chicken; rat; secreted expressed sequence tag; sEsed sequence tag; EST; probe; chemotactic; proliferative;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page 487-488;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  мссоу лм,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treacy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0104436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US24206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĭ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LaVallie ER, Bowman MR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   803pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; antibacterial; antifungal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Collins-Racie LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       analgesic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Evans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tag; sEST;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     haemostatic;
```

246 A; 217 C;

206 G;

163

T; 0 other;

28-OCT-1993

```
RESULT 13
AAQ51015
Qγ
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                               D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 672;
                                                                                         Transgenic; narcotics; analgesics; expression; antisense therapy; analogue; derivative; degradation; chronic pain; cancer; morphine
                                                                                                                                                                                                           AAQ51015 standard; cDNA;
                                                        Rattus rattus
                                                                                 detection;
                                                                                                                                                                                   AAQ51015;
                                                                                                                                                            17-MAY-1994
                                                                                                                                                                                                                                                                            815
                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                              695
                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                             635
                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              575
                                                                                                                                                                                                                                                                                                                            755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               155 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 getgetetgtgtetetteceaaggagtgeeegtgegeageggagatgeeacetteeeeaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                         tatccaccatacct 828
                                                                                                                                                                                                                                                                                      tatccaccatacat 674
                                                                                                                                                                                                                                                                                                                                   tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                    agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                       99tagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atttottcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                        tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                          agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                        ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atttottcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                 diagnosis; additicts;
                                                                                                                                 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                         (first entry)
                                                                                                                                 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65.0%;
99.7%;
                                                                                                                                                                                                            3069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 670.8; DB 21; Pred. No. 8.7e-198; 0; Mismatches 2;
                                                                                 ds.
                                                                                           cancer; morphine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             832;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                         814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   214
                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                           694
                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   274
                                                                                                                                                                                                                                                                                                                                                                        754
```

```
Q_{\overline{Y}}
                                            B
                                                                   QΨ
                                                                                              B
                                                                                                                    γQ
                                                                                                                                                В
                                                                                                                                                                      QΥ
                                                                                                                                                                                                  망
                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                    DЬ
                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                           DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                  δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QY
                                            1116
                                                                                                1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequence is that of the rat opioid receptor gene. The gene is able to hybridise with endogenous mRNA for an opioid binding protes to suppress expression of an opioid receptor gene. Transgenic animals contg. the gene in reverse are useful in diagnosis and treatment for addiction to narcotic analyesics. By admin. of antisense fragments of the gene, chronic pain, such as in terminal cancer patients can be treated without development of tolerance to diagnostically to detect addicts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3069 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim
                  557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Transgenic animals and novel oligo-nucleotide constructs - use in diagnosis and treatment of addiction to narcotic analgesics
                                                                                                                        440
                                                                                                                                                  996
                                                                                                                                                                                                    936
                                                                                                                                                                                                                                                      876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1993-351719/44
                                                                                                                                                                          380
                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                        816
                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                         756
                                                                                                                                                                                                                                                                                                                                                                                  140
                                                                                                                                                                                                                                                                                                                                                                                                                                                      636 agatgtaccatcccgcctactggatcgtcttctcggccaccactgccctgctcttcatcc 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lee NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (LEEN/) LEE N M.
(LIPP/) LIPPMAN D.
(LOHH/) LOH H H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                            696
                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 71.2 hes 723; Conservative
tggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatg 616
                                    ttacttggagacacatototocoa---aagoggttggctttgtgagtggaggagacgaatact
                                                                                       tgaatgagataagcagtgtgaccttgttatgtctcgcaattggcagaccagaaccaacag
                                                                                                        ttaatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacgg
                                                                                                                                          gggtccacctcatagtgcaagttcctccccagataatgaacatctcttcagacattactg
                                                                                                                                                          999tocacotcattgtgcaagtatctcocaaaattgtagagatttcttcagatatctcca 439
                                                                                                                                                                                            gcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatg
                                                                                                                                                                                                                                                                                              cctggctaaaccgcagcacaatcctctacgctgggaatgaccaagtggtccatagaccctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctc
                                                                                                                                                                                                                                                                                                                                                  tccggcagggagagagcgccaccctcaggtgtaccatagatgaccgggtcaccagagtag
                                                                                                                                                                                                                                                                                                                                                                  tccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccggggtgg
                                                                                                                                                                                                                                                                                                                                                                                                   caggagtgccggtgcgcagcggagatgccacctttcccaaagctatggacaacgtgacgg
                                                                                                                                                                                                                                                                                                                                                                                                                   aaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacgg 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lippman D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92US-0866677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93WO-US02913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            803 A; 787 C; 661 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Toh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 536; DB 14;
Pred. No. 1.4e-155;
0; Mismatches 290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          818 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 3069;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein
                                                                                         1115
                                                                                                                                            1055
                                                                                                                                                                                                                                               935
                                                                                                                                                                                                                                                                         319
                                                                                                                                                                                                                                                                                                  875
                                                                                                                                                                                                                                                                                                                                                   815
                                                                                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.
```

```
RESULT 14
AAQ51017
ID AQ6510
XX AAQ510
XX AAQ510
XX Transg
EW analog
KW Transg
KW Transg
KW detect
XX AG610
XX AG70
EW AG70
EW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ν
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        β
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   analogue; derivative; degradation; detection; diagnosis; additicts; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                        (LEEN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Transgenic; narcotics; analgesics; expression; antisense therapy; analogue; derivative; degradation; chronic pain; cancer; morphine
                                                                                                                                                                                                                                                                                                      WPI; 1993-351719/44
                                                                                                                                                                                                                                                                                                                                                                                                               (/HHO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rat opioid receptor gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ51017 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1596 cactggcttgtctctggctctcagggaccttctttgcccacttcttcatcaagttt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1416
                                                                                                                                                                                                                                                                                                                                                            Lee NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W09321309-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-MAY-1994 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ51017;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               999caggotgcgtctggctgctcttctggtcttgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ccagcatcaccctgtatgggcctggagcagtcattgatggtgtaaactcggcctctagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ccagcalcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgagga 976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccaccaccaatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tggatggcgtgagaattgagaacaaaggccgcatatccactttgactttcttcaatgtct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agaaaggggtgaaagtggaaaacagacctttcctcaaaactcatcttcttcaatgtct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctgctgtccccatggctgaattccagtggttcaaggaagataccaggttagccactggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cagaagccaaggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acgtggccgcgcgtggtacggagagtaaaggtcaccgtgaactatccaccatacattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 caaaagcgaagaacactggcgtttcagtaggccagaagggcatcctgagctgtgaagcct 1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atgtcgctgcacctgatgttcggaaagtaaaaatcactgtaaactatcctccctatatct 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tggaaatctcagacatcaaacgcgaccaatctggagagtatgagtgcagcgccttgaatg
                                                                                                                                                                                                                                                                                                                                                                                                            ) LEE N M.
) LIPPMAN D.
) LOH H H.
                                                                                                                                                                                                                                                                                                                                                      Lippman D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92US-0866677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93WO-US02913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA;
                                                                                                                                                                                                                                                                                                                                                      Loh
                                                                                                                                                                                                                                                                                                                                                      HH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  morphine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  676
```

The sequence is that of the rat opioid receptor gene. The gene is able to hybridise with endogenous mRNA for an opioid binding protein to suppress expression of an opioid receptor gene. Transgenic animals contg. the gene in reverse are useful in diagnosis and treatment for addiction to narcotic analgesics. By admin. of

Transgenic animals and novel oligo-nucleotide constructs in diagnosis and treatment of addiction to narcotic analges

narcotic analgesics

Page 34-7;

49pp; English.

```
οy
                                                          В
                                                                               Qy
                                                                                                           Db
                                                                                                                                  Qy
                                                                                                                                                              В
                                                                                                                                                                                     γQ
                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                             Qy
        gg
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                              Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88888%&
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 689
        1218
                                                                                                                                                                1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense fragments of the gene, chronic pain, such as in terminal cancer patients can be treated without development of tolerance to analgesics such as morphine. The gene may aslo be used diagnostically to detect addicts.

See also AAQ51015-6.
                                                                                                             1098
                                918
                                                                                                                                      798
                                                                                                                                                                                         738
                                                                                                                                                                                                                   978
                                                                                                                                                                                                                                                                      918
                                                                                                                                                                                                                                                                                               618
                                                                                                                                                                                                                                                                                                                         858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2179
                                                                                                                                                                                                                                             678
                                                                                                                                                                                                                                                                                                                                                 558
                                                                                                                                                                                                                                                                                                                                                                           798
                                                                                                                                                                                                                                                                                                                                                                                                                                                      441
                                                                                                                                                                                                                                                                                                                                                                                                                              738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          438
                                                                                                                                                                                                                                                                                                                                                                                                     501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
cagcalcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggag
                                                                                                                                                                       agcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                     tgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgc
                                                                                                       ggatggcgtgagaattgagaacaaaggccgcatatccactttgactttcttcaatgtctc
                                                                                                                       tgctgtccccatggctgaattccagtggttcaaggaagataccaggttagccactggcct
                                                                                                                                                                                                             aaaagcgaagaacactggcgtttcagtaggccagaagggcatcctgagctgtgäagcctc
                                                                                                                                                                                                                            agaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctc 737
                                                                                                                                                                                                                                                                 tgtcgctgcacctgatgttcggaaagtaaaaatcactgtaaactatcctccctatatctc
                                                                                                                                                                                                                                                                               cgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttc 677
                                                                                                                                                                                                                                                                                                                   ggaaatctcagacatcaaacgcgaccaatctggagagtatgagtgcagcgccttgaatga
                                                                                                                                                                                                                                                                                                                                  ggaaattcagggcatcacccggggagcagtcagggggactacgagtgcagtgcctccaatga
                                                                                                                                                                                                                                                                                                                                                                                   tacttggagacacatctctcccca---aagcggttggctttgtgagtgaagacgaatactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agtgatcatcttggtcaacacgcctacccagtacagtatcatgatccagaatgtggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ggtccacctcatagtgcaagttcctccccagataatgaacatctcttcagacattactgt 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aggagtgccggtgcgcagcggagatgccacctttcccaaagctatggacaacgtgacggt 437
                                                                                                                                                                                                                                                                                                                                                                                                                          gaatgagataagcagtgtgaccttggtatgtctcgcaattggcagaccagaaccaacagt 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctggctaaaccgcagcacaatcctctacgctgggaatgacaagtggtccatagaccctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccggcagggagagagcgccaccctcaggtgtaccatagatgaccgggtcaccagagtagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 548 A; 533 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        50.2%;
72.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 518.2;
Pred. No. 3.8e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ç;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ω ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .8e-150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            263;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ω
··
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
     1277
                                                     1217
                                                                                                                                                           1097
                                                                                                                                                                                     797
                                                                                                                                                                                                               1037
                                                                                                                                                                                                                                                                                                                                             617
                                                                                                                                                                                                                                                                                                                                                                                                 557
                                                                                                                                                                                                                                                                  977
                                                                                                                                                                                                                                                                                                                     917
                                                                                                                                                                                                                                                                                                                                                                         857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
```

```
В
                        Qy
                                                  DЬ
                                                                        Q
                                                                                                                                                                                                               ₽
                                                                                                                       ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ51016
                                                                                                                                                   Matches
                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                  The sequence is that of the rat opioid receptor gene. The gene is able to hybridise with endogenous mRNA for an opioid binding protein to suppress expression of an opioid receptor gene. Transgenic animals contg. the gene in reverse are useful in diagnosis and treatment for addiction to narcotic analyssics. By admin. of antisense fragments of the gene, chronic pain, such as in terminal cancer patients can be treated without development of tolerance to analyssics such as morphine. The gene may aslo be used diagnostically to detect addicts.
                                                                                                                                                                                                                                                                                                                                                                                               Transgenic animals and novel oligo-nucleotide constructs - useful in diagnosis and treatment of addiction to narcotic analgesics
                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Transgenic; narcotics; analgesics; expression; antisense therapy; analogue: derivative; degradation; chronic pain; cancer; morphine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1278 actggcttgtctctggctctcagggaccttctttgcccacttcttcatcaagttt 1332
                                                                                                547
                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1993-351719/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lee NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W09321309-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         detection; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rat opioid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ51016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ51016 standard;
     667
                          201
                                                  607
                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (/HHOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LIPP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    978
                                                                                                                          81
                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15
           ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                             ctggctaaaccgcagcacaatcctctacgctgggaatgacaagtggtccatagaccctcg
                                             ccggcagggagagagcgccaccctcaggtgtaccatagatgaccgggtcaccagagtagc
                                                                                              aggagtyccggtgcgcagcggagatgccacctttcccaaagctatggacaacgtgacggt 606
                                                                                                         aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggcaggctgcgctgctgcctcttctggtcttgcacctgcttctcaaattt 1032
                                                                                                                                                   ; 689
                                                                                                                                                                                                                                                                                                                                                                         رن
دن
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LIPPMAN
LOH H H.
                                                                                                                                                                                                               2337
                                                                                                                                                                                                                                                                                                                                                                       Page 30-3; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lippman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       receptor
                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                             BP; 581 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92US-0866677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93WO-US02913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cDNA;
                                                                                                                                                           50.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry]
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Loh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         additicts; ds
                                                                                                                                                                                                             578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                           HH
                                                                                                                                                  0;
                                                                                                                                              Score 518.2; DB 14.
Pred. No. 3.9e-150;
0; Mismatches 263;
                                                                                                                                                                                                             C; 520 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВÞ
                                                                                                                                                                                                             658 T; 0 other;
                                                                                                                                                                         DB 14;
                                                                                                                                                 Indels
                                                                                                                                                                      Length 2337;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  morphine;
                                                                                                                                                ω
                                                                                                                                                                                                                                                                                                                                  protein
                                                                                                                                                Gaps
                                                                                                                      140
                        260
                                                666
                                                                       200
```

Ϋ́

261

cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt

۳.

```
DЬ
       맑
                               20
                                                                                ΔÃ
                                                                                                               В
                                                                                                                                      QΥ
                                                                                                                                                                 В
                                                                                                                                                                                         QY
                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                              οy
                                                                                                                                                                                                                                                                            Вþ
                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                      DЪ
                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                          DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Λδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ŋ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                          1387
                                                                                                               1327
                                                                                                                                                                   1267
                                                                                                                                                                                                                                                                            1147
                                                                                                                                                                                                                                                                                                                                   1087
1447 actggcttgtctctggctctcagggaccttctttgcccacttcttcatcatgttt 1501
                                                                                                                                                                                                                1207 tgctgtccccatggctgaattccagtggttcaaggaagataccaggttagccactggcct 1266
                                                                                                                                                                                                                                                                                                                                                                                        1027
                                                                                     918
                                                                                                                                         858
                                                                                                                                                                                            798
                                                                                                                                                                                                                                                                                                        678
                                                                                                                                                                                                                                                                                                                                           618 cgtggccgccgcgcgcgtggtacggagagtaaaggttcaccgtgaactatccaccatacatttc 677
                                                                                                                                                                                                                                                                                                                                                                                                558 ggaaattcaggggcatcaccggggagcagtcaggggactacgagtgcagtgcctccaatga 617
                                                                                                                                                                                                                                                                                                                                                                                                                                           967
                                                                                                                                                                                                                                                                                                                                                                                                                                                     501 tacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatactt 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          907 gaatgagataagcagtgtgaccttgttatgtctcgcaattggcagaccagaaccaacagt 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           727 agtgatcatcttggtcaacacgcctacccagtaccagtatcatgatccagaatgtggatgt
                 cagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggag 977
                                                                                                                                                                                                                                  agcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaa 797
                                                                                                                                                                                                                                                                     aaaagcgaagaacactggcgtttcagtaggccagaagggcatcctgagctgtgaagcctc 1206
                                                                                                                                                                                                                                                                                      agaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctc 737
                                                                                                                                                                                                                                                                                                                             tgtcgctgcacctgatgttcggaaagtaaaaatcactgtaaactatcctccctatatctc 1146
                                                   ggatggcgtgagaattgagaacaaaggccgcatatccactttgactttcttcaatgtctc 1326
                                                                                                                                                                                 gaaaggggtgaaagtggaaaacagacctttcctctctcaaaactcatcttcttcaatgtctc 857
                                                                                                                                                                                                                                                                                                                                                                                 ggaaatctcagacatcaaacgcgaccaatctggagagtatgagtgcagcgccttgaatga 1086
                                                                                                                                                                                                                                                                                                                                                                                                                                      taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggtccacctcatagtgcaagttcctccccagataatgaacatctcttcagacattactgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            786
```

Search completed: July 11, 2002, 23:01:01 Job time: 8929 sec

```
Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM nucleic - nucleic search, using sw model
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seg length: 0 seg length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenEmbl:*
1: gb_ba:*
2: gb_htg:
                                                                                                                                                                                                                18:
19:
20:
21:
22:
23:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-700-397-1
1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               July 11, 2002, 19:07:41; Search time 4995.85 Seconds (without alignments) 4322.825 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1797656 segs, 10463268293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atgaaaaccatccagccaaa.....tgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                          gb_pl:*
gb_pr:*
                                                           em_htg_hum:*
em_htg_inv:*
em_htg_other:*
em_htgo_inv:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                    gb_ph:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gb_pat:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gb_ov:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gb_ba:*
                                                                                                                       em_un:*
em_vi:*
                                                                                                                                                                                               em_pat:*
em_ph:*
                                                                                                                                                                                                                                                                                                    em_fun:*
em_hum:*
                                                                                                                                                                                                                                                                                                                                                                gb_sy:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gb_om:*
                                                                                                                                                      em_sts:*
                                                                                                                                                                 em_ro:*
                                                                                                                                                                                                                                                                                      em_in:
                                                                                                                                                                                em_pl:*
                                                                                                                                                                                                                              em_ov:*
                                                                                                                                                                                                                                            em_or:
                                                                                                                                                                                                                                                          em_om:*
                                                                                                                                                                                                                                                                        em_mu:*
                                                                                                                                                                                                                                                                                                                                    em_ba:*
                                                                                                                                                                                                                                                                                                                                                gb_vi:*
                                                                                                                                                                                                                                                                                                                                                                                               gb_sts:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3595312
```

76. 76.		98. 98. 27	33.		57.	534.2 518.2 518.2 464.2	950.4 804.8 642.8 640.8 635.8 635.8 604.8 5604.8
7.1	790.2	ω <i>7 7</i>	• > > > > > :	· · · · · · · · · ·	33444	51.8 50.2 50.2 45.0	
116069 123320 176676 176102	203572 203572 786 71276	756 1059 1809 42263	912 945 452	977 1014 1017 1238 1238	756 1107 1158 2050 1194 924	3069 1478 2179 2337 2335 2935	1839 2040 1410 1058 1257 1035 1638 1013 1533 1556 2593
) N O N) N M O E	21560	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	n 1 0 0 0 0 0	の い い い い い 下	10 10 12 12	9 5 5 5 5 5 5 5 6 7 8
078 086 223	AC016769 GGA132998 AC102028	AR030589 AR030590 GGA132999 AB017139 AP004721	3057 3058 3058 7942	AR030577 AR030577 AR030577 HSU41901 AR030575 RNU31554	AF271232 GGLAMPG9 GGLAMPG19 GGE19SPRO GGELAMPG11 AR030579	, -XXXX	AF126426 RNU16845 AF282980 AF292935 GGCEPU1 AB011810 AF271233 AF271233 AF292936 FFFNUMF5A AF292934
AP000784 AP000863 AC012234 AP002808	01676 01676 13299 10202	AR030589 AR030590 AJ132999 AB017139 AP004721	AR030578 AR030580 AR030580 AR030582 AX079423	AR030574 Seq AR030577 Seq AR030577 Seq U41901 Human AR030575 Seq U31554 Ratt	AF271232 Synthetic AF271232 Synthetic AF271232 Synthetic AF2720 G. gallus mR Z94720 G. gallus mR Z98171 G. gallus mR AR030579 Sequence	M88709 Ra L34774 Hun M88710 Ra M88711 Ra M88711 Ra AF271618 AJ225897 C	AF126426 Homo sapi U16845 Rattus norv AF282980 Mus muscu AF292935 Gallus ga E72497 G.gallus mR AB011810 Gallus ga AF2721233 Synthetic AF292936 Gallus ga Y08170 Gallus gall AF292934 Gallus gall AF292934 Gallus gall
4 w 4 œ		sequent Sequent Gallus 9 Rattu	Sequence Sequence Sequence Sequence	Sequence 7 Sequence 7 Sequence Human limbi Sequence Rattus norv	32 Synthetic G.gallus mR G.gallus mR Gallus gall Gallus mR G.gallus mR	Rattus nor Human (clon Rattus nor Rattus nor 18 Syntheti 7 Gallus ga	Rattus nor Rattus nor Rattus nor Rattus nor Rattus gallus ga G.gallus ga G.gallus ga G.gallus ga Gallus ga Bovine mRNA

ALIGNMENTS

ი ი

REFERENCE AUTHORS TITLE REFERENCE AUTHORS KEYWORDS SOURCE RESULT 1
AF126426
LOCUS
DEFINITION ACCESSION VERSION FEATURES JOURNAL TITLE JOURNAL ORGANISM Eukaryota; Metazoa; Chordata; C: Mammalia; Eutheria; Primates; C: 1 (bases 1 to 1839)
Li,G., Jin,J., Tan,X., Hu,S., Y: Cloning and identification of huppublished Li,G., Jin,J., Tan,X., Hu,S., Yuan,J. and Qiang,B. Direct Submission
Submitted (05-FEB-1999) Biochemistry, Institute of Basic Medical Sciences, 5 Dong Dan San Tiao, Beijing 100005, PR China
Location/Qualifiers
1. .1839 Homo sapiens neurotrimin (HNT) mRNA, complete cds. AFF126426 Homo sapiens AF126426.1 GI:7158997 human. (bases 1 to 1839) /organism="Homo sapiens' human Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo. Yuan, J. and Qiang, B. human neurotrimin full length cDNA PRI 06-MAR-2000

Result No.

Score

Query Match Length DB

IJ

Description

SUMMARIES

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 951; Conserv
                               1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene
                                                         741
                                                                                    945
                                                                                                               681
                                                                                                                                           885
                                                                                                                                                                   621
                                                                                                                                                                                              825
                                                                                                                                                                                                                          561
                                                                                                                                                                                                                                                    765
                                                                                                                                                                                                                                                                               501
                                                                                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                                              645
                                                                                                                                                                                                                                                                                                          705
                                                                                                                                                                                                                                                                                                                                                                                        381
                                                                                                                                                                                                                                                                                                                                                                                                                   585
                                                                                                                                                                                                                                                                                                                                                                                                                                             321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         345
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81 aggagtgcccgtgcgcagcggagatgccaccttcccccaaagctatggacaacgtgacggt 140
                        AGTCCCCTCAGCAGAATTCCAGTGGTACAAGGATGACAAAAGACTGATTGAAGGAAAGAA
                                        agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                              agccaagggtacaggtgtccccgttgggacaaaagggggacactgcagtgtgaagcctcagc
                                                                             AGCCAAGGGTACAGGTGTCCCCGTGGGACAAAAGGGGGACACTGCAGTGTGAAGCCTCAGC
                                                                                                                                  GGCCGCGCCCGTGGTACGGAGAGTAAAGGTCACCGTGAACTATCCACCATACATTTCAGA
                                                                                                                                                  99ccgcgcccgfggtacggagtaaaggtcaaccgtgaactatccaccatacatttcaga
                                                                                                                                                                                       AATTCAGGGCATCACCCGGGAACAGTCAGGGGACTACGAGTGCAGTGCCTCCAATGACGT
                                                                                                                                                                                                       aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt 620
                                                                                                                                                                                                                                            TAATGAAGGGAACAATATTAGCCTCACCTGCATAGCAACTGGTAGACCAGAGCCTACGGT
                                                                                                                                                                                                                                                                                                                    taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                                                                                                       GGTCCACCTCATTGTGCAAGTATCTCCCCAAAATTGTAGAGATTTCTTCAGATATCTCCAT
                                                                                                                                                                                                                                                                                                                                                                        ggtocacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat 440
                                                                                                                                                                                                                                                                                                                                                                                                            CTGGCTAAACCGCAGCACCATCCTCTATGCTGGGAATGACAAGTGGTGCCTGGATCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGTGGTCCTTCTGAGCAACACCCAAACGCAGTACAGCATCGAGATCCAGAACGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCGGCAGGGGAGAGCGCCACCCTCAGGTGCACTATTGACAACCGGGTCACCCGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'translation="MGVCGYLFLPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDN
'TVRQGESATLRCTILDRKVTRVAKLNRSTILYAGNUKWCLDPRVYLLSNYPQTQYS1EI
ONVDYDEGGYTCSVQTDHBYKTSRVHLIVQVSKIVEISSDISINEGNNISLTCIAT
GRPEPTVTWRHISPKAVGFVSEDBYLEIGGITEQSGDYECSASNUVAAFVKVT
VNYPPYISEAKGTGYPVGQKGTLQCEASAVPSABFQWYKDDKRLIEGKKGYKVENRPF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLP
LLVLHLLLKF" 506 c 503 g 366 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=1
/product="neurotrimin"
/protein_id="AAF37591.1"
/db_xref="GI:7158998"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /gene="HNT"
265. .1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="similar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="HNT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .1839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        92.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 950.4; DB 9;
Pred. No. 4.2e-253;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       503 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus neurotrimin"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1839;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           é
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                        740
                         1064
                                                  800
                                                                              1004
                                                                                                                                    944
                                                                                                                                                               680
                                                                                                                                                                                       884
                                                                                                                                                                                                                                              824
                                                                                                                                                                                                                                                                        560
                                                                                                                                                                                                                                                                                                                              500
                                                                                                                                                                                                                                                                                                   764
                                                                                                                                                                                                                                                                                                                                                        704
                                                                                                                                                                                                                                                                                                                                                                                                             644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  404
                                                                                                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                    Qy
                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
MEDLINE
REFERENCE
                                                                       Ϋ́
                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNU16845
LOCUS
                                                                                                                                                                                    BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                    Matches
                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1185
                     141
                                               564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1065
                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       801
ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc 200
                                        AGGAGTGCCGGTGCGTAGCGGAGATGCCACCTTTCCCAAAGCTATGGACAACGTGACGGT
                                                     aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                                                                    860;
                                                                                                               Similarity
```

20 밁 Qγ 뫄 Qy 밁 Qy В

Conservative

78.0%; 90.3%;

Score 804.8; DB Pred. No. 1.3e-21 0; Mismatches 9

DB 10;

Indels Length 2040;

0;

Gaps

0

623

Qγ В Ωy Ъ Qy Ъ Qy В δÃ 몽 QΥ DЬ QУ Дb δÃ

밁

```
AGGCTGCGTCTGCCTGCCTCTTCTGGTCTTGCACCTGCTTCTCAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCATGCTATTTGGTCCAGGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAGGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       catcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACATGACTATGGGAACTACACTTGCGTGGCCTCCAACAAGCTGGGCCACACCAATGCCAG 1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGGGTGAAAGTGGAAAACAGACCTTTCCTCTCAAAACTCATCTTCTTCAATGTCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus
U16845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cloning of neurotrimin defines a new subfamily expressed neural cell adhesion molecules J. Neurosci. 15 (3), 2141-2156 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (02-NOV-1994) James L. Salzer, Cell Biology, Center, 550 First Avenue, New York, NY 10016, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Salzer, J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95198094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and Salzer, J.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Struyk, A.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                U16845.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNU16845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 2040)
ruyk,A.F., Canoll,P.D., Wolfgang,M.J., Rosen,C.L., D'Eustachio,P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 2040)
    504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        norvegicus neurotrimin
                                   VTVROGESATIRCTIDNRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTOTQYSIEI ONDDVEDEGYTCSVQTDNHFKTSRVHLLVQVSPKIVEISBISINEGNNISLTCIAT GREEFTVTWHALISRAGEVESEDESLEEIOGITREDGGSEYECSASNDVAAPVYRRVNVT VNYPPYISEAKGTGVPVGOKGTLQCEASSVPSABEQWFKDDKRLVBGKKGYKVENREF LSRLYFFINVSEHDYGNYTCVASNKLGHTNASINLFGFGAVSEVNNGTSRRAGCIWLLP
                              LLVLHLLLKF"
                                                                                                                                                                                 /product="neurotrimin"
/protein_id="AAA67445.1"
/db_xref="GI:755185"
                                                                                                                                                                                                                                                                                                    484.
                                                                                                                                                                                                                                                                                                                  /organism="Rattus norvegicus"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
                                                                                                                                                    /translation="MGVCGYLFLPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDN
                                                                                                                                                                                                                                                       /codon_start=1
                                                                                                                                                                                                                                                                          /note="neural cell adhesion
                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Metazoa; Chordata; Craniata; Vertebrata; Euteleost
Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GI:755184
  544 c
                                                                                                                                                                                                                                                                                                    .1518
    551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2040 bp
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complete cds
                                                                                                                                                                                                                                                                          molecule"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of differentially
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ROD
                                                                                                                                                                                                                                                                                                                                                                                                                                                         UYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             860
```

밁

and Lee, S.H.

Korea

```
RESULT
AF282980
LOCUS
                                             REFERENCE
                                                                                                                                                                                   DEFINITION
                                                                                                                                                                    ACCESSION
                                                                                                                                 KEYWORDS
          AUTHORS
TITLE
                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                1344
                                                                                                                                                                                                                                                                                             1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1104
                                                                                                                                                                                                                                                                                                                                                              1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1044
                                                                                                                                                                                                                                                                                                                            981
                                                                                                                                                                                                                                                                                                                                                                                               921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   624
                                                                                                                                                                                                                                                                                                           aggctgcgtctggctgctcttctggtcttgcacctgcttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                               agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                                       AGGCTGCATTTGGCTCCTCCTCTTCTGGTCTTACACCTGCTCCTCAAATTT
                                                                                                                                                                                                                                                                                                                                                           CATCATGCTATTTGGCCCCAGGTGCTGTCAGCGAGGTCAACAATGGGACGTCAAGGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                              ACACGACTATGGGAACTACACATGTGTGGCATCCAACAAGTTGGGCCACACCAATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAGTCAAAGTGGAAAACAGACCTTTCCTTTCAAGACTCACCTTTTTCAACGTCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTAAGGGTACAGGTGTCCCCCGTGGGGCAGAAGGGGGACTCTGCAGTGTGAAGCCTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGCACCAGTCGTACGAAGAGTGAACGTCACCGTGAACTATCCACCATACATCTCAGA 1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               990090900091991a099a9a91aaa9910ac0919aac1a10caccataca11110aga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATICCAGGGCATCACTCGGGAGCAGTCAGGCGAGTATGAGTGCAGCGCCTCCAACGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgccgctccaatgacgt 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAATGAAGGGAACAACATCAGCCTCACTTGCATAGCCACAGGTAGACCGGAGCCTACAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ggtccacctcattgtgcaagtatctcccaaaattgtagagattttcttcagatatctccat 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGGTTCTCCTGAGTAACACCCCAGACCCCAGTACAGCATTGAGATCCAGAATGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cgtggtccttctgagcaacaccccaaacgcagtacagcatcgagatccagaacgtggatgt 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTCCCTTCAGCAGAATTTCAGTGGTTCAAGGATGACAAAAGACTGGTTGAAGGGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCCACCTCATTGTACAAGTATCTCCCAAAATTGTAGAGATTTCTTCAGATATCTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTATGATGAGGGCCCTTATACCTGCTCGGTGCAGACAGCAACCACCCTAAGACCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGCTAAACCGCAGTACCATCCTCTATGCTGGAAATGACAAGTGGTGCCTAGATCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGGCAGGGGGAGAGCGCCACCCTCAGGTGCACAATTGACAACCGAGTCACCCGGGTGGC
                Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;

1 (bases 1 to 1410)

1 (bases 1, Chol.S.C., Kim,J., Jeon,J.W., Kim,K.D. and

Kim,T.H., Chol.S.C., Kim,J., Jeon,J.W., Kim,K.D.
                                                                                                                                                AF282980
AF282980.1
       Cloning and expression of mouse neurotrimin
                                                                                                                                                                                 Mus musculus neurotrimin mRNA,
                                                                                                               house mouse
                                                                                                                                                GI:12642539
                                                                                                                                                                                                     1410
                                                                                                                                                                                                 ďď
                                                                                                                                                                                 complete
                                                                                                                                                                                                 mRNA
                       Kim, K.D. and Lee
                                                                                                                                                                                   cds.
                                                                                                                                                                                                   linear
       gene
       in
                                                                                                                                                                                                                                                                                         1515
                                                                                                                                                                                                                                                                                                                          1032
       the
                                                      Euteleostomi;
; Murinae; Mus
                                                                                                                                                                                                   ROD
     developing
                                                                                                                                                                                                   01-FEB-2001
                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1343
                                                                                                                                                                                                                                                                                                                                                                                                                             1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1103
                                                                                                                                                                                                                                                                                                                                                                                            980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               683
                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE CO
                                                      밁
                                                                                     δÃ
                                                                                                                                                         Qγ
                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                                                                                        밁
                                                                                                                                                                                                                             γQ
                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                    621
                                                      561
                                                                                     561
                                                                                                                          501
                                                                                                                                                           501
                                                                                                                                                                                              441
                                                                                                                                                                                                                                441
                                                                                                                                                                                                                                                                   381
                                                                                                                                                                                                                                                                                                    381
                                                                                                                                                                                                                                                                                                                                       321
                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 849; Conser
ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATCCAGGGCATCACTCGGGAACAGTCAGGCGAGTACGAGTGCAGCGCCTCCAACGACGT
                                                                       aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                        TAATGAAGGGAACAACATCAGCCTCACTTGCATAGCCACAGGTAGGCCGGAGCCTACAGT
                                                                                                                                                                                                                taatgaagggaacaatattagcctcacctgcatagccactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                 GGTCCACCTCATTGTACAAGTATCTCCCAAAATTGTAGAGATTTCTTCAGATATCTCCAT
                                                                                                                                                                                                                                                                                     ggtccacctcattgtgcaagtatctcccaaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                     GTACGATGAGGGCCCTTATACCTGCTCGGTACAGATAGACAATCACCCTAAGACCTCCAG
                                                                                                                                                                                                                                                                                                                                                     TGTGGTCCTCCTGGGTAACACCCCAGACCCAGTACAGCATTGAGATCCAGAATGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                         cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGCTAAACCGCAGTACCATCCCCTATGCTGGAAATGACAAGTGGTGCCTAGATCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctggctaaaccgcagcaccatcctctatgctgggaatgaccaagtggtgcctgggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGCAGGGGGAGAGCGCCACCCTCAGGTGCACAATTGACAACCGAGTCACCCGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccggcagggggagagcgccaccctcaggtgcactattgacaaccggggtcacccgggtggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 (bases 1 to 1410)
Kim,T.H., Choi,S.C., Kim,J., Jeon,J.W.,
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     University,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (27-JUN-2000) Graduate School of Biotechnology,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nervous system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /protein_id="AAK00276.1"
/db_xref="G1:12642540"
/traslation="MyCGSYFFLPWKCLVVVSLRLLELVPTGVPVRSGDATFPKAMDN
/traslation="MyCGSYFFLPWKCLVVVSLRLLELVPTGVPVRSGDATFPKAMDN
/traslation="MyCGSYFFLPWKCLVVVSLRLLELVPTGVPVRSGDATFPKAMDN
/traslation="MyCGSYFFLPWKCLVVVSLRLLELVPTGVPVLLGNTGTGVSIEI
/VVVQGESATLRCTIDNRVTRVAMLNRSTIPYAGNDKKCLDERVLLSUTGTATF
/NVVDTDGFPYTGAGTGVPVGGVGTLQCEASAVPSAEGQGEYECSASNDVAAPVPRVKVF
/NVVPYTGAGTGVPVGGVGTLQCEASAVPSAEGQGFYCCASNDVAAPVPROKVF
LSKLTFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSEVNNGTSRRAGCTWLLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LLVLHLLLKF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:10090"
/tissue_type="brain"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /product="neurotrimin"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="similar to Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /strain="ICR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1,5-ka Anam-dong Sungbuk-ku,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             365 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       76.3%;
89.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 787.2; DB 10
Pred. No. 9.5e-208;
0; Mismatches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kim, K.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seoul 136-701,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1410;
```

0;

Gaps

0;

140 140

320

260 260 200

380 380 320 밁 Qy 멍 Qγ Db Qy В Qy В Qy В Qy Вþ Qy Dβ ρy B 20

Qy DЬ Qy DЬ δÃ B Qγ В Qγ

밁

SOURCE

680 620 620 560 560 500 500 440 440

VERSION

δÃ

Query Match Best Local

Similarity

62.3%; 80.5%;

Score 642.8; DB 5; Pred. No. 1.3e-167;

Length

1058;

```
JOURNAL
REFERENCE
AUTHORS
TITLE
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
AF292935
                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ър
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCATGCTATTTGGTCCCGGTGCTGTCAGTGAGGTCAACAATGGGACATCAA&AGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          catcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACATGACTATGGGAACTACACATGTGTGGCCTCCAACAAGCTGGGTCACACCAACGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAGTCAAAGTGGAAAACAGACCTTTCCTTTCAAAACTCACCTTTTTCAACGTCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aggggtgaaagtggaaaacagacctttcctctcaaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agtococtcagcagaattocagtggtacaaggatgacaaagactgattgaaggaagga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGCTGCATTTGGCTCCTCCCTCTTCTGGTCTTACACCTGCTCCTCAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTCCCTTCAGCAGAATTTCAATGGTTCAAGGATGACAAAAGACTGGTCGAAGGAAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCGGCACCAGTGGTACCAAGAGTGAAGGTCACCGTGAACTATCCACCATACTTCTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCTAAGGGCACAGGTGTCCCCGTGGGGCAGAAGGGGACTCTGCAGTGTGAAGCTTCCGC
                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (04-AUG-2000) Human Anatomy a University of Liverpool, Ashton Street, 3GE, UK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AF292935 1058 bp mRN Gallus gallus CEPU-Se alpha 2 isoform AF292935 1 GI:9887384
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 1058)
Lodge, A.P. and Moss, D.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Characterisation of CEPU-Se,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vert
Archosauria; Aves; Neognathae; Galliformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lodge, A.P., McNamee, C.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chicken.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    asianinae; Gallus.
(bases 1 to 1058)
              250
              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CEPU-1
     /product="CEPU-Se alpha 2 isoform"
/protoin_id="Asg01878.1"
/protoin_id="Asg01878.1"
/db_xref="GI:9887385"
/translation="MagAsMQHEVSWVIFAGMAALLLEQGVPVRSGDATFPKAMDNVTVRQGESATLRCSVDNRVTRVAWLNRSSILYAGNDKWCLDPRVVLLANIKTQYSIQIHD VDVDBGPTTCSVQTDNHEKTSSVHLITQVSPKITEISSDISINEGGNVSLTCIATGR PDPTITWRHISPKAVGFISEDEVLEITGITRRGQGGECGASNNYAAPVVQRVKVTVN YPPYISDAKSTGVPVGRVGLIMCEASANPSADFQWKDDKRLAEGQKGLKVENKAFFS RLTFFNVSEQDYGNYTCVASNQLGNTNASMILYGEQH"
a 320 c 310 g 178 t
                                                                                                                                                                                                                                          /gene="CEPU-Se"
52. .993
                                                                                                                                                                                   /note="IgLON family
/codon_start=1
                                                                                                                                                                                                                      /gene="CEPU-Se"
                                                                                                                                                                                                                                                                           /dev_stage="E18"
l. .1058
                                                                                                                                                                                                                                                                                                                            /organism="Gallus gallus"
/db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                          /tissue_type="brain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Howard, M.R., Reed, J.E. Se, a secreted isoform
                                                                                                                                                                                                  protein; secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CEPU-Se)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Vertebrata; Euteleostomi;
mes; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                              Liverpool,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  isoform
                                                                                                                                                                                                                                                                                                                                                                                                          Cell Biology, The iverpool, Merseyside
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear VR
VU-Se) mRNA,
                                                                                                                                                                                                  form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E. and Moss,
n of the Idl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032
                                                                                                                                                                                                    Of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         complete
                                                                                                                                                                                                  CEPU-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IgLON family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 680
                                                                                                                                                                                                                                                                                                                                                                                                            L69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cds
```

B Qγ B Qy Вb Q_{λ} Ъ γQ

```
Qγ
                                                         DЬ
                                                                                  Qγ
                                                                                                                 밁
    В
                                                                                                                                         Qy
                                                                                                                                                                      밁
                                                                                                                                                                                             Qy
                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                     ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  β
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
    948
                              903
                                                         888
                                                                                     843
                                                                                                                 828
                                                                                                                                           783
                                                                                                                                                                     768
                                                                                                                                                                                                                            708
                                                                                                                                                                                                                                                       663
                                                                                                                                                                                                                                                                                   648
                                                                                                                                                                                                                                                                                                             603
                                                                                                                                                                                                                                                                                                                                       588
                                                                                                                                                                                                                                                                                                                                                                   543
                                                                                                                                                                                                                                                                                                                                                                                              528
                                                                                                                                                                                                723
                                                                                                                                                                                                                                                                                                                                                                                                                        483
                                                                                                                                                                                                                                                                                                                                                                                                                                                  468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    w
                  gggccacaccaatgccagcatcatgctatttggt 936
                                                                     cttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagct 902
                                                                                                           GCTGGCTGAAGGACAGAAAGGGCTGAAGGTGGAAAACAAAGCCTTCTTCTCCCGACTGAC
                                                                                                                           actgattgaaggaaaggaggtgaaagtggaaaacagacctttcctctcaaaactcat 842
                                                                                                                                                                GATGTGTGAAGCCTCCGCTGTGCCCTCTGCTGACTTCCAGTGGTACAAAGACGACAAGCG
                                                                                                                                                                               gcaglytgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaaag
                                                                                                                                                                                                                                         tccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacact 722
                                                                                                                                                                                                                                                                             CAGTGCCTCCAACGACGTGGCCGCGCCTGTCGTCCAGCGAGTCAAAGTCACCGTCAACTA
                                                                                                                                                                                                                                                                                                cagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaacta
                                                                                                                                                                                                                                                                                                                                                    tgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaactgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCACCCCAAGACATCTCGCGTGCACCTCATTGTGCAAGTGTCGCCGAAAATTACCGAGAT
 AGGAAACACCAACGCCAGCATGATCCTTTATGGT
                                                     TTTCTTCAACGTCTCCGAGCAGGACTACGGCAACTACACCTGCGTGGCCTCCAACCAGCT
                                                                                                                                                                                                                       CCCACCGTACATCTCGGATGCGAAGAGCACCGGTGTGCCGGTGGGGCAGAAGGGCATCCT
                                                                                                                                                                                                                                                                                                                                    CGAGGACGAGTACCTGGAGATCACAGGCATCACGAGGGAGCAGTCGGGCGAGTACGAGTG
                                                                                                                                                                                                                                                                                                                                                                                          CAGGCCAGACCCCACAATCACCTGGAGACACATCTCGCCCAAAGCTGTGGGCTTCATCAG
                                                                                                                                                                                                                                                                                                                                                                                                             tagaccagagectacggttacttggagacacatctctccccaaagcggttggctttgtgag
                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCTTCTGACATCTCCATCAATGAAGGTGGCCAACGTCAGCCTCACCTGCATAGCCACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagagat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatcga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccgggtcacccgggtcgcctggctaaaccgcagcaccatcctctatgctgggaatgacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaagc 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATATGGCCCAGGCGAAAATGCAGCACCCCGTCTCATGGGTGATCTTCGCCGGGATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGTGCTTGGACCCGAGGGTGGTGCTCCTGGCCAACACCCAAAACCCCAGTACAGCATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGCGTCACCCGCGTGGCCTGGCTGAACCGCAGCAGCATCCTCTATGCCGGCAATGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATGGACAACGTGACTGTGCGGCAAGGGGAGAGTGCCACGCTCAGGTGCTCCGTGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGCACTCCTCCTCCCAAGGAGTGCCCGTGCGCAGGAGGATGCCACCTTCCCCAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                            782
                                                                                                                                                                                                                                                                                                          662
                                                     947
                                                                                                            887
                                                                                                                                                                                                                                                                                                                                                              602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       107
                                                                                                                                                                  827
                                                                                                                                                                                                                         767
                                                                                                                                                                                                                                                                               707
                                                                                                                                                                                                                                                                                                                                    647
                                                                                                                                                                                                                                                                                                                                                                                        587
                                                                                                                                                                                                                                                                                                                                                                                                                    542
                                                                                                                                                                                                                                                                                                                                                                                                                                               527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

RESULT GGCEPU1

```
BASE COUNT
ORIGIN
                                                                     Qy
                                                                                                                       Qy
                                                                                                                                                                          Qy
                   γQ
                                             B
                                                                                                 Β̈́
                                                                                                                                                     밁
                                                                                                                                                                                                          В
                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                               Matches 750;
                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sig_peptide
CDS
                                                                                                                                                                                                                                                                                                                                                                       mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                     243
                                               264
                                                                                                                                                      144
                                                                       183
                                                                                                  204
                                                                                                                            123
                                                                                                                                                                                63
                                                                                                                                                                                                         84
                                                                                                                                                                                                                                                                           Local Similarity
9t99t9cct9gatcctcgcgttggtccttctgagcaacacccaaaagcagtacagcatcga
                                        CCGCGTCACCCGCGTGGCCTGGCTGAACCGCAGCAGCATCCTCTATGCCGGCAATGACAA
                                                        ccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaa
                                                                                             TATGGACAACGTGACTGTGCGGCAAGGGGGAGAGTGCCACGCTCAGGTGCTCCGTGGACAA
                                                                                                            tatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgacaa
                                                                                                                                                  CGCACTCCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGC
                                                                                                                                                                  tgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaagc
                                                                                                                                                                                                        GAATATGGCCCAGGCGAAAATGCAGCACCCCGTCTCATGGGTGATCTTCGCCGGGATGGC 143
                                                                                                                                                                                                                       gaaaaccatccagccaaaaatgcaccaattctatctcttgggcaatcttcacggggctggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Archosauria; Aves; Neognathae; Galliformes; Phasianinae; Gallus.

1 (bases 1 to 1257)
Spallmann, F. and Brummendorf, T.
CEPU-1, a novel immunoglobulin superfamily by developing cerabellar Purkinje cells
J. Neurosci. 16 (5), 1770-1779 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCEPU1
G.gallu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
Submitted (17-MAY-1996) Bruemmendorf T., Max-Planck-Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Developmental Biology, Molecular Biology, Tuebingen, Germany, 72076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Brain; CEPU-1; chicken.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G.gallus mRNA
Z72497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tuebingen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bruemmendorf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96370549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Z72497.1 GI:1325950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 1257)
                                                                                                                                                                                                                                                                                                                                               297
                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                         /evidence=experimental
/product="CEPU-1"
/product="CEPU-1"
/product="CEPU-1"
/product="CEPU-1"
/product="CEPU-1"
/product="CEPU-1"
/db_xref="GI:1325951"
/db_xref="GI:1325951"
/db_xref="GI:1325951"
/db_xref="SBISS-PROT:Q90773"
/translation="MAQAKMCHPVSWVIFAGMAALLLFQGVPVRSGDATFPKAMDNVT
/translation="MAQAKMCHPVSWVIFAGMAALLLFQGVPVRSGDATFPKAMDNVT
/VRQGESATLRCSVDNRVTRVAWLNRSSILYAGNDKWCLDPRVVLLANTKTQYSIQIHD
VDVYDEGPYTCSVQTDNHENTSKYHLLTVQVSFKITEFSSDLSINBGGNVSLTCIATGR
PDPTITMHHISPKAVGFISEDETLEITGITREQSGEYECSASNDVAAFVVGNKAFFS
RLIFFNVSEQDYGNYTCVASNQLGNTNASMILYEETTTALTPWKGPGAVHDGNSGAWR
RTGFTNVSEQDYGNYTCVASNQLGNTNASMILYEETTTALTPWKGPGAVHDGNSGAWR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_type="brain"
/clone_lib="lambda_gt1
/dev_stage="E16"
88 . .171
88 . .1149
                                                                                                                                                                                                                                                                                                                                                      /product="CEPU-1"
                                                                                                                                                                                                                                                                                                                                                                                  RGSCAWLLALPLAQLARQF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="KB17"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:9031"
                                                                                                                                                                                                                                                                          62.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for CEPU-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              glycoprotein;
                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                            Score 640.8; DB 5;
Pred. No. 4.7e-167;
0; Mismatches 182;
                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1257
                                                                                                                                                                                                                                                                                                                                            ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gt11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GPI-anchor protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata;
                                                                                                                                                                                                                                                                                                                                            214 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Galliformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vertebrata; Eute
nes; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Spemannstrasse 35,
                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     molecule,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Euteleostomi;
                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     is
                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-APR-1998
                                                                                                                       182
                302
                                                                                              263
                                          323
                                                                  242
                                                                                                                                                 203
                                                                                                                                                                           122
                                                                                                                                                                                                                                 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for
                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                             KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                          RESULT
AB011810
                                                                                                                                                                                                                                                                                                                                                                                                       ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                  REFERENCE
                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                LOCUS
                                       AUTHORS
TITLE
                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                               984
                                                                                                                                                                                                                                                                                                                                                                                                         903
                                                                                                                                                                                                                                                                                                                                                                                                                                   924
                                                                                                                                                                                                                                                                                                                                                                                                                                                              843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGGTGCTTGGACCCGAGGGTGGTGCTCCTGGCCAACACCCAAAACCCCAGTACAGCATCCA
```

```
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                actgattgaaggaaaggaggggtgaaagtggaaaacaggacctttcctctcaaaactcat 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gggccacaccaatgccagcatcatgctatttg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagct 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGCTGAAGGACAGAAAGGGCTGAAGGTGGAAAACAAAGCCTTCTTCTCCCGACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaaggggacact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAGGACGAGTACCTGGAGATCACAGGCATCACGAGGGAGCAGTCGGGCGAGTACGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGCCAGACCCCACAATCACCTGGAGACACATCTCGCCCAAAGCTGTGGGCTTCATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaactgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagagat 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGAAACACCAACGCCAGCATGATCCTTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTCTTCAACGTCTCCGAGCAGGACTACGGCAACTACACCTGCGTGGCCTCCAACCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGTGTGAAGCCTCCGCTGCCCTCCGCTGACTTCCAGTGGTACAAAGACGACAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCACCGTACATTTCGGATGCGAAGAGCACCGGTGTGCCGGTGGGGCAGAAGGGCATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTGCCTCCAACGACGTGGCCGCCCTGTCGTCCAGCGAGTCAAAGTCACCGTCAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaacta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tgaagacgaatacttggaaattcagggcatcaccgggagcagtcaggggactacgagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCTTCTGACATCTCCATCAATGAAGGTGGCCAACGTCAGCCTCACCTGCATAGCCACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCACCCCAAGACATCTCGCGTGCACCTCATTGTGCAAGTGTCGCCGAAAATTACCGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AB011810
AB011810.1
                                         Kimura,Y., Shirabe,K., Fukushima,M., Takeshita,M. and Tanaka,H. CEPU-1: an Immunoglobulin Superfamily Molecule, Has Cell Adhesion Activity and Shows Dynamic Expression Patterns in Chick Embryonic
Activity and Shows
Spinal Cord
Unpublished (1998)
                                                                                                                                                                     Graduate School of Medical Sciences, Division of Developmental Neurobiology; 4-24-1 Kuhonji, Kumamoto, Kumamoto 862-0976, Japa (E-mail;ykimura@gpo.kumamoto-u.ac.jp, Tel:81-96-373-5294,
                                                                                                                                                                                                                                              Submitted (03-MAR-1998) Yoshishige Kimura, Kumamoto University
                                                                                                                                                                                                                                                                           1 (bases 1 to 1035)
Kimura,Y., Shirabe,K. and Tanaka,H.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                 alternative splicing; CEPU-1. Gallus gallus cDNA to mRNA. Gallus gallus
                                                                                                                                                (E-mail:ykimura@gpo.kumamoto-u.ac.jp, Fax:81-96-373-5292)
                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AB011810
                                                                                                                           (sites)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gallus mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GI:3298455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CEPU-1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VRT 09-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443
                                                                                                                                                                                               Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          563
```

```
ΩУ
                                                         Вb
                                                                                       Qy
                                                                                                                          Db
                                                                                                                                                        Qy
                                                                                                                                                                                           Db
                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                           DЬ
                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                        741
                                                         681
                                                                                                                            621
                                                                                                                                                           621
                                                                                                                                                                                            561
                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                       441 CAATGAAGGTGGCAACGTCAGCCTCACCTGCATAGCCACGGGCAGGCCAGACCCCCACAAT
                                                                                                                                                                                                                                                                                                                                                             441
                                                                                                                                                                                                                                                                                                                                                                                      381 CGTGCACCTCATTGTGCAAGTGTCGCCGAAAATTACCGAGATCTCTTGTGACATCTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
agtococtcagoagaattocagtggtacaaggatgacaaagactgattgaaggäaagaa 800
                                                                                                                                                                                    GATCACAGGCATCACGAGGGAGCAGTCGGGGGGAGTACGAGTGCAGTGCCTCCAACGACGT
                                                                                                                                                                                                         aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt 620
                                                                                                                                                                                                                                                    CACCTGGAGACACATCTCGCCCAAAGCTGTGGGCTTCATCAGCGAGGACGAGTACCTGGA
                                                TGCGAAGAGCACCGGTGTGCCGGTGGGGCAGAAGGGCATCCTGATGTGTGAAGC©TCCGC
                                                                                                                   GGCCGCGCTGTCGTCCAGCGAGTCAAAGTCACCGTCAACTACCCACCGTACATCTCGGA
                                                                                                                                      ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                           agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                                        tacttggagacacatotctcccaaagcggttggctttgtgagtgaagacgaatacttgga
                                                                                                                                                                                                                                                                                                                                        taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 500
                                                                                                                                                                                                                                                                                                                                                                                                             ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGGTGCTCCTGGCCAACACCCAAAAACCCCAGTACAGCATCCAGATCCACGACGTTGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGGCAAGGGGAGAGTGCCACGCTCAGGTGCTCCGTGGACAACCGCGTCACCCGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGCTGAACCGCAGCAGCATCCTCTATGCCGGCAATGACAAGTGGTGCTTGGACCCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggttggc 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACTGT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /protein_id="BAA31514.1"
/db_xref="GI:3298456"
/translation="MGVGGCLALIPRCLVVLCLRILFLVPAGVPVRSGDATEPKAMDN
/translation="MGVGGCLALIPRCLVVLCLRILFLVPAGVPVRSGDATEPKAMDN
VTVRQGESAFILRCSVDNRVTRVAMLNRSSILYAGNDKWCLDPRVVLLANTKTQYSTQI
HDVDVLDEGPYTCSVQTDNHPKYSRVHLIVQYSPKITEISSDISINEGGNVSLTCIAT
GRPDPTITWRHISPKAVGFISEDEYLEITGITREQSGEYECSASNDVAAPVQRVKVT
VNYPPYISDAKSTGYPVGGKGILMCEASAVPSADFQWYKDDKRLAEGQKGLKVENKAF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LPLAQLARQF'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FSRLTFFNVSEQDYGNYTCVASNQLGNTNASMILYGPGAVHDGNSGAWRRGSCAWLLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="alternative splicing product of CEPUI ge
Acc# 272497: Spaltman,F. and Bruendorf,T.(1996)
J.Neurosci.16:1770-1779."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="CEPU-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
1. .1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61.6%;
79.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 635.8; DB 5;
Pred. No. 1.1e-165;
0; Mismatches 197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1035;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene: EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       320
                                                                                                                   680
                                                                                                                                                                                                                                                                                      560
                                                                                                                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                      560
                                                                                                                                                                                                                                                                                                                       500
                                                                                                                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
```

```
BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AF271233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                        CDS
                                                                                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     861 acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aggctgcgtctggctgctcttctggtcttgcacctgcttctcaaatt 1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGATCCTTTATGGCCCCGGTGCAGTGCACGATGGCAACAGCGGTGCGTGGCGGCGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 catcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGGACTACGGCAACTACACCTGCGTGGCCTCCAACCAGCTAGGAAACACCCAACGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (24-MAY-2000) College of Natural Resources and Life Science, Division of Biological Resources R-6517, Dong-A University, 840 Hadan-2 Dong Saha-Gu, Pusan 604-714, Republic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AF271233 1638 L
Synthetic construct secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Korea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kim, D. -S. and Moss, D.J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Secretory IgCEPUS-GFP fusion protein expressions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kim, D.-S. and Moss, D.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                artificial sequence.
1 (bases 1 to 1638)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (IgCEPUS-GFP) gene, AF271233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 1638)
       386
/translation="MAQAKMOHPVSWVIFAGMAALLLFQGVPVRSGDATFPKAMDNVT VRGGESATLRGSVDRIVTAMLIKESJLYAGNDKWCLDRRVLLANTKTQYSTQIHD VDVDEGFYTCSVOTDHIBYTSWHLIVDVSKITEITSDISINEGGNVSLTCIATGR PDPTITWRHISPKAVGFISEDEYLEITGITREDSGEYECSASNDVAAPVQGVKKVTVN YPPYISDAKSTGVPVQCKGILMCBASAVPSADFOWYKDDKRLABGOKGLKVENKAFFS RLTFERVSEDDYKHTCVASNQGIHRPVATMVSKGEELFTGVPFILVELDGDVNGHKF SVSGEGEGDATYGKLTLKFICTTGKLPVWPPTLVTTLTYGVQCFSKYDDHKQHDFFK SAMPBGYVGEFIFFKDGONYKTRAEVKFEDDTLVNRIELKGIDFKEDGNILGHKLEY SAMPBGYVGEFIFFKDGONYKTRAEVKFEDDTLVNRIELKGIDFKEDGNILGHKLEY NYNSHNVYIMADKOKNGIKVNFKIRNIEDGSVQLADHYQANTPIGDGPVLLPDNHYL STOSALSUDPUKKRDMYLLETVTAAGITLGMDELKK"

86 a 533 c 460 g 259 t
                                                                                                                                                                                                   /product="secretory IgCEPUS-GFP fusion protein"
/protein_id="AAK54682.1"
/db_xref="GI:14161269"
                                                                                                                                                                                                                                                                                               /gene="IgCEPUS-GFP"
/note="SooCI-517; I
                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1. .1638
                                                                                                                                                                                                                                                            /transl_table=11
                                                                                                                                                                                                                                                                                 /codon_start=]
                                                                                                                                                                                                                                                                                                                                                    /gene="IgCEPUS-GFP"
                                                                                                                                                                                                                                                                                                                                                                                        db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                           organism="synthetic"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GI:14161268
                                                                                                                                                                                                                                                                                                                                       .1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1638 bp
                                                                                                                                                                                                                                                                                             Igcepus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cds
                                                                                                                                                                                                                                                                                                                                                                                                       construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IgCEPUS-GFP fusion protein
                                                                                                                                                                                                                                                                                                 derived
                                                                                                                                                                                                                                                                                               from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                               Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              transfected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SYN 21-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Of.
```

Query Match Best Local Similarity Matches 734;

60.4%; 80.0%;

Conservative

0;

Score 623.6; DB Pred. No. 3e-162 0; Mismatches 1:

DB 12;

Indels Length 1638;

0,

0;

```
RESULT
AF292936
LOCUS
    DEFINITION
ACCESSION
VERSION
                                                                                                           Ωy
                                                                                                                                   В
                                                                                                                                                      Qy
                                                                                                                                                                            B
                                                                                                                                                                                            Q
                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                DЪ
                                                                                                                                                                                                                                                                                  VQ
                                                                                                                                                                                                                                                                                                           Ъ
                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                     DЪ
                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                            QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γg
                                                                                         906
                                                                                                              912
                                                                                                                                    846
                                                                                                                                                                                                                        726
                                                                                                                                                                                                                                                                  666
                                                                                                                                                                                                                                                                                        672
                                                                                                                                                                                                                                                                                                             606
                                                                                                                                                                                                                                                                                                                                 612
                                                                                                                                                                                                                                                                                                                                                                                                 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186
                                                                                                                                                                             786
                                                                                                                                                                                                 792
                                                                                                                                                                                                                                             732
                                                                                                                                                                                                                                                                                                                                                       546
                                                                                                                                                                                                                                                                                                                                                                           552
                                                                                                                                                                                                                                                                                                                                                                                                                    492
                                                                                                                                                                                                                                                                                                                                                                                                                                          426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           126
                                                                                                                                                                                                                                                                                                                                                                                                                                                               432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                        aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttctcaa
                                                                                         GCCGGTCGCCACCATGGT
                                                                                                             caatgccagcatcatgct 929
                                                                                                                               CGTCTCCGAGCAGCACTACGGCAACTACACCTGCGTGGCCTCCAACCAGGGGATCCACCG
                                                                                                                                            tytototgaacatgaotatgggaactacacttgogtggoctocaaccaagctgggccacac
                                                                                                                                                                                                                                 agcotcagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattga
                                                                                                                                                                                                                                                               CATCTCGGATGCGAAGAGCACCGGTGTGCCGGTGGGGGCAGAAGGGCCATCCTGATGTGTGA
                                                                                                                                                                                                                                                                            catttcagaagccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtga
                                                                                                                                                                                                                                                                                                          CAACGACGTGGCCGCGCCTGTCGTCCAGCGAGTCAAAGTCACCGTCAACTACCCACCGTA
                                                                                                                                                                                                                                                                                                                       caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccata
                                                                                                                                                                                                                                                                                                                                                   GTACCTGGAGATCACAGGCATCACGAGGGAGCAGTCGGGCGAGTACGAGTGCAGTGCCTC
                                                                                                                                                                                                                                                                                                                                                               atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctc
                                                                                                                                                                                                                                                                                                                                                                                                          gacctctagggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcaga
                                                                                                                                                                          CCCCACAATCACCTGGAGACACATCTCGCCCAAAGCTGTGGGCTTCATCAGCGAGGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCTCCATCAATGAAGGTGGCAACGTCAGCCTCACCTGCATAGCCACGGGCAGGCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      tatetecattaatgaagggaacaatattageeteacetgeatageaactggtagaceaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACATCTCGCGTGCACCTCATTGTGCAAGTGTCGCCGAAAATTACCGAGATCTCTTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACCCGAGGGTGGTCCTCGGCCAACACCCAAAACCCCAGTACAGCATCCAGATCCACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ggatcetegegtggteettetgagcaacacecaaaegcagtacagcategagatecagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGCGTGGCCTGGCTGAACCGCAGCAGCATCCTCTATGCCGGCAATGACAAGTGGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTGACTGTGCGGCAAGGGGAGAGTGCCACGCTCAGGTGCTCCGTGGACAACCGCGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tctcttccaaggagtgccgtgcgcagcggagatgccaccttccccaaagctatggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGGCGAAAATGCAGCACCCCGTCTCATGGGTGATCTTCGCCGGGATGGCCGCACTCCT
             AF292936 1013 bp mRNA linear V
Gallus gallus CEPU-Se alpha 1 isoform (CEPU-Se) mRNA,
AF292936
    AF292936.1 GI:9887386
                                                                                         923
                     VRT 24-AUG-2000
A, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431
                                                                                                                                905
                                                                                                                                                     911
                                                                                                                                                                          845
                                                                                                                                                                                               851
                                                                                                                                                                                                                    785
                                                                                                                                                                                                                                                                                    731
                                                                                                                                                                                                                                                                                                          665
                                                                                                                                                                                                                                                                                                                              671
                                                                                                                                                                                                                                                                                                                                                                         611
                                                                                                                                                                                                                                                                                                                                                                                              545
                                                                                                                                                                                                                                                                                                                                                                                                                  551
                                                                                                                                                                                                                                                                                                                                                                                                                                       485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               65
                                                                                                                                                                                                                                          791
                                                                                                                                                                                                                                                               725
                                                                                                                                                                                                                                                                                                                                                   605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71
B
                  δÃ
                                         밁
                                                          Qy
                                                                                   Вb
                                                                                                      Qy
                                                                                                                              В
                                                                                                                                                 Qy
                                                                                                                                                                         밁
                                                                                                                                                                                            Q
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                 Ϋ́
                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                       BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                    441
                                         381
                                                              381
                                                                                   321
                                                                                                         321
                                                                                                                              261
                                                                                                                                                   261
                                                                                                                                                                         201
                                                                                                                                                                                             201
                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                         699;
                                                                                                                                                                                                                                                                                                                                                                       230
```

```
441 CAATGAAGGTGGCAACGTCAGCCTCACCTGCATAGCCACGGGCCAGGCCCAGACCCCCACAAT
                                                                                                                                                                                                                                                                                    taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                    CGTGCACCTCATTGTGCAAGTGTCGCCGAAAATTACCGAGATCTCTTGTGACATCTCCAT
                                                                                     ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                         GGTGGTGCTCCTGGCCAACACCCAAAACCCCAGTACAGCATCCAGATCCACGACGTGGACGT
                                                                                                                                                                                                                                   cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                                                                                                                                                                          GCGGCAAGGGGAGAGTGCCACGCTCAGGTGCTCCGTGGACAACCGCGTCACCCGCGTGGC
                                                                                                                                                                                                                                                                                                                                                                            ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc
                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCCAAAGCTATGGACAACGTGACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chicken.
Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 (bases 1 to 1013)
Lodge, A.P. and Moss, D.J
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Characterisation of CEPU-Se,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 1013)
Lodge, A.P., McNamee, C.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           University of Liverpool,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (04-AUG-2000) Human Anatomy and Cell Biology,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein CEPU-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HDVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKITEISSDISINEGGNVSLTCIAT
GRDDFTTWHHISPAVGFISEDBYLEITGITREQGGEYECSASNIVAAPVVQRVKVT
VNYPPYISDAKSTGVPVGQKGILMCEASAVPSADFQWYKDDKRLAEGQKGLKVENKAF
FSRLTFFNVSEQDYGNYTCVASNQLGWINASMILYGEQH"
309 c 293 g 181 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /translation="MGYGGCLALPWRCLVYLCLRLLFLYPAGYPYRSGDATFPKAMDN
VTVRQGESATLRCSYDNRVTRYAWLNRSSILYAGNDKWCLDPRYYLLANTKTQYSIQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /product="CEPU-Se alpha 1 isoform"
/protein_id="AAG01879.1"
/db_xref="GI:9887387"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="IgLON family protein; secreted /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:9031"
/tissue_type="brain"
/dev_stage="E18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="CEPU-Se"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="CEPU-Se"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      58.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 604.8; DB 5;
Pred. No. 4.7e-157;
0; Mismatches 157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ashton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Howard,M.R., F
Se, a secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; Galliformes; Phasian:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Street, Liverpool,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Reed, J.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . and Moss,D.J of the IgLON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Merseyside L69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CEPU-1"
500
                                                                                                     440
                                 500
                                                                    440
                                                                                                                                          380
                                                                                                                                                                            380
                                                                                                                                                                                                                 320
                                                                                                                                                                                                                                                  320
                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                         260
                                                                                                                                                                                                                                                                                                                                                                                                                                  140
                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
```

```
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FENINH55A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             γg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                         COMMENT
                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                         REFERENCE
                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                       TITLE
                                                  JOURNAL
                                                                           AUTHORS
                                                                                                    REMARK
                                                                                                                            JOURNAL
                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                        MEDLINE
                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                       JOURNAI
                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGATCCTTTATGGT 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      catcatgctatttggt 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGGACTACGGCAACTACACCTGCGTGGCCTCCAACCAGCTAGGAAACACCCAACGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCGAAGAGCACCGGTGTGCCGGTGGGGCAGAAGGGCATCCTGATGTGTAAGCCTCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCGCCCTGTCGTCCAGCGAGTCAAAGTCACCGTCAACTACCCCACCGTACATCTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATCACAGGCATCACGAGGGAGCAGTCGGGCGAGTACGAGTGCAGTGCCTCCAACGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACCTGGAGACACATCTCGCCCAAAGCTGTGGGCTTCATCAGCGAGGACGAGTACCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FFNINH55A
Gallus gal
Y08170
                   Submitted (20-APR-1999) D.J. Moss, Liverpool University, Human Anatomy and Cell Biology, Liverpool, L69 3BX, UK
On Apr 26, 1999 this sequence version replaced gi:1617043.
                                                                                                                                                                                                                                                               A family of glycoproteins (GP55), which inhibit neurite outgrowth, are members of the Ig superfamily and are related to OBCAM, neurotrimin, LAMP and CEPU-1
J. Cell. Sci. 109 (Pt 13), 3129-3138 (1996)
                                                             Direct Submission
                                                                                                  Submitted (21-MAR-1996) D.J.A. Wilson, Liverpool University, Anatomy and Cell Biology, Liverpool, L69 3BX, UK Revised by [3]
                                                                                                                                       Wilson, D.J.A.
Direct Submission
                                                                                                                                                                                      Cloning of CEPU-s, a secreted isoform of CEPU-1, from chick: structural diversity of IgLON family
                                                                                                                                                                                                                                                                                                                              Wilson, D.J., Kim, D.S., Clarke, G.A., Marshall + Clarke, S.
                                                                             Moss
                                                                                                                                                                                                                    Moss, D.J
                                                                                                                                                                                                                                                        97157768
                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Gailiformes; Phasianidae; Phasianinae, Gallis; Gallis; Gallis; Obases 1 to 1533)
                                                                                                                                                                                                                                                                                                                                                                                                                       OBCAM protein.
                                                                                                                                                                                                                            Lodge, A.P., Kim, D.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Y08170.2 GI:4688845
                                                                                     (bases 1 to 1533)
                                                                                                                                                                                                                            (bases 1 to 1533)
                                                                                                                                                                (bases 1 to 1533)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          gallus mRNA for
Location/Qualifiers
1. .1533
                                                                                                                                                                                                                            Howard, M.R., McNamee, C.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             for
                                                                                                                                                                                                                                                                                                                                                                                                                                                           OBCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      đđ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          gamma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                           isoform
                                                                                                                                                                                                 and OBCAM cDNAs
                                                                                                                                                                                                                           Smith, N. and
                                                                                                                                                                                       proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    560
                                                                                                                          Human
       Db
                          Ω
                                                         밁
                                                                               δÃ
                                                                                                           밁
                                                                                                                                Qy
                                                                                                                                                           Вр
                                                                                                                                                                                  QΥ
                                                                                                                                                                                                            B
                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                 DЪ
                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
```

```
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                   553
                                                                                                                                                                                                                                                493
                                                                                                                                                                                                                                                                                       500
                                                                                                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    193
                                                                                                                                                                                                                                                                                                                                                                                                                                                   380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity nes 734; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
ATGCCAAGAACACAGGCGCCTCAGTGGGCCAGAAGGGCATCCTGCAGTGCGAGGCCTCGG
                               aagccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtgaagcctcag
                                                                              TGGCCGTCCCAGATGTCCGGAAAGTCAAAGTCACTGTCAACTACCCGCCGTACATCTCCA 672
                                                                                                       tggccgcgcgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcag
                                                                                                                                                                                    aaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacg
                                                                                                                                                                                                                                                                     TGAACGAAGGCAGCAGTGTGACCCTCATGTGCTTTGGCAGGCCGGAGCCCACTG
                                                                                                                                                                                                                                                                                                                                             ttaatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacgg
                                                                                                                                                                                                                                                                                                                                                                                                       GCGTCCACCTCATCGTGCAAGTCCCCCCTCAGATTGTCAACATCTCATCAGACATCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                              999tccacctcattgtgcaagtatctccccaaaattgtagagatttcttcagatatctcca 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gcgtggtccttctgagcaacaccccaaacgcagtacagcatcgagatccagaacgtggatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtgg 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacgg 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATGTACCATCCTGCCTGCATCGTCTTCACCGCCACCACTGCCCTGCTCTTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATCACGGGCATCACACGGGAGCAGTCGGGGGGAGTATGAGTGCAGTGCTGTCAATGATG
                                                                                                                                                                                                                                            GCGTGGTCATCCTCTCCAACACCCAAAACCCCAGTACAGCATCAAGATCCACAACGTGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGTGGTTGAACCGCAGCACCATCCTTTATGCTGGCAATGACAAGTGGTCTATAGACAACC 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCGGCAAGGGGAGAGTGCCACGCTCAGGTGTACCGTGGATGACAGGGTGAGGCGGGTAG 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="OBCAM protein gamma isoform"
/protein_id="CAB41420.1"
/protein_id="CAB41420.1"
/db_xref="GI:4688446".1"
/translation="MYHPAGWIVFTATTALLFIPGVPVRSGDATFPKAMDNVTVRQGE
SATLRCTVDDRVRRVAWLNRSTILYAGNDKWSIDNRVVILSNTKTQYSIKIHNVDVYD
EGPYTCSVQTDNHEKTSRVHLLYQVPPQIVNISSDITVNEGSSVTLMCLAFGREEPTV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TWRHLSGKGQGFVSEDEYLEITGITREQSGEYECSAVNDVAVPDVRKVKVTVNYPPYI
SNAKNTGASVGQKGILQCEASAVPVAEFQWFKEDTRLANGLEGVRIESKGRLSTLTFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NYSEKDYGNYTCVATNKLGNTNASIILYGPGAVHDSGNAASRAAAGLCLWATLLARLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone_lib="lambda gt10"
/dev_stage="embryonic day 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="brain"
/clone_lib="lambda gi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Gallus gallus"
/db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54.98;
72.58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 566.6; DB 5;
Pred. No. 2.1e-146;
0; Mismatches 279;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (E18)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
    732
                                                                                                                                                               612
                                                                                                                                                                                                                                            552
                                                                                                                                                                                                                                                                                                                           492
                                                                                                                                                                                                                                                                                                                                                                                                       432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
```

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
AF292934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   740
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         caggctgcgtcttgctgctcttctggtcttgcacctgcttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aacatgactatgggaactacacttgcgttggcctccaacaagctgggccacaccaatgcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGCTGGCCTCTGGGCCACCCTCCTCGCTCGCCTCCTCCTCGACTTT, 1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCATCATCCTGTACGGGCCCGGAGCGGTGCACGACAGTGGCAATGCAGCCTCCCGGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGTCCCCGTGGCAGAGTTTCAGTGGTTCAAGGAGGACACCAGGTTAGCAAATGGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGGCGTGCGGATCGAGAGCAAGGGCCCGCCTCTCGACGCTGACCTTCTTCAATGTGTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AF299.934 1556 bp m Gallus gallus OBCAM alpha l isoform AF292934 AF292934.1 GI:9887382
                                                                                                                                                                                                                                                                                                                                                                                                                            Direct Submission
Submitted (04-AUG-2000) Human Ar
University of Liverpool, Ashton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lodge, A.P., Howard, M.R., McNamee, C.J. and Moss, D.J. Co-localisation, heterophilic interactions and regulated of IgLON family proteins in the chick pervous system Brain Res. Mol. Brain Res. 82 (1-2), 84-94 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          викатуота; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chicken.
                                                                                                                                                                                                                                                                                                                                                                                                                  3GE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lodge, A.P. and Moss, D.J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .1042360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to
                                                                        305
                                                                                                                                                                                                                                                                                                                                                                                                                  цĸ
                                                                                                              LSTLTEPAVSEKDYGNYTCYATNKLGNINASIILYGPGAVHDSGNAASRAAGLCLWA
TLLARLILDF"
1 481 c 477 g 293 t
                                                                                                                                                                                                                                                                                  /gene="OBCAM"
17. .1051
                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                     /codon_start=1
                                                                                                                                                                                                                                                 /note="IgLON family protein"
                                                                                                                                                                                                                                                                 /gene="OBCAM"
                                                                                                                                                                                                                                                                                                                          /dev_stage="E18"
                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:903
                                                                                                                                                                                                                                                                                                                                                                      /organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 to 1556;
                                                                                                                                                                                                                                                                                                                                        tissue_type="brain"
53.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1556)
Score 547.2; DB 5; Pred. No. 5.1e-141;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Anatomy and Cell Biology, The
                                                                                                                                                                                                                                                                                                                                                                                                                             Street, Liverpool, Merseyside
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (OBCAM)
            Length 1556;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 799
                                                                                                                                                                                                                                                                                                                                                                                                                               E69
```

DEFINITION ACCESSION

> Bovine mRNA OBCAM.

> > for

opioid

2593 bp binding p

protein/cell

adhesion

molecule

MAM 31-MAR-1995

```
RESULT
BTOBCAM
                                                                                                          B
                                                                                                                                 20
                                                                                                                                                             밁
                                                                                                                                                                                      Ş
                                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                           Вþ
                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                     997
                                                                                                                                                              877
                                                                                                                                                                                                                                                                                                                                                                                 637
                                                                                981
                                                                                                                                                                                       861
                                                                                                                                                                                                                  817
                                                                                                                                                                                                                                           801
                                                                                                                                                                                                                                                                      757
                                                                                                                                                                                                                                                                                               741
                                                                                                                                                                                                                                                                                                                           697
                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                         621
                                                                                                                                                                                                                                                                                                                                                                                                                                     577
                                                                                                                                                                                                                                                                                                                                                                                                                                                              561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                     CGCTGGCCTCTGGGGCCACCCTCCTCGCTCGCCTCCTCCTCGACTTT
                                                                   aggctgcgtctggctgctcttctggtcttgcacctgcttctcaaattt
                                                                                                                          acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaccaatgccag
                                                                                                                                                                                                                                    aggggtgaaagtggaaaacagacctttcctcctccaaaactcatcttcttccatgtctctga
                                                                                                                                                                                                                                                                                   agtcccctcagcagaattccagtggtacaaggatgacaaaaggactgattgaaggaaagaa
                                                                                                                                                                                                                                                                                                                                       agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGGACTATGGCAACTACACGTGTGTGGCCACAAACAAGTTGGGCAACACCAATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                  GATCACGGGCATCACACGGGAGCAGTCGGGGCGAGTATGAGTGCAGTGCTGAATGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACGAAGGCAGCAGTGTGACCCTCATGTGCTTGGCCTTTGGGAGGCCCGAGCCCACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                                                                      CATCATCCTGTACGGGCCCGGAGCGGTGCACGACAGTGGCAATGCAGCCTCCCGGGCAGC
                                                                                                                                                                                                               GGGCGTGCGGATCGAGAGCAAGGGCCGCCTCTCGACGCTGACCTTCTTCAATGTGTCGGA
                                                                                                                                                                                                                                                                     TGTCCCCGTGGCAGAGTTTCAGTGGTTCAAGGAGGACACCAGGTTAGCAAATGGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                  ggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGTCCACCTCATCGTGCAAGTCCCCCCTCAGATTGTCAACATCTCATCAGACATCACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                         TGCCAAGAACACAGGCGCCTCAGTGGGGCCAGAAGGGCATCCTGCAGTGCGAGGCCTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTGGTCATCCTCCAACACCAAAAACCCAGTACAGCATCAAGATCCACAACGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGGTTGAACCGCAGCACCATCCTTTATGCTGGCAATGACAAGTGGTCTATAGACAACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGGCAAGGGGAGAGTGCCACGCTCAGGTGTACCGTGGATGACAGGGTGAGGCGGGTAGC
                                                                                                                                                                                                                                                                                                                                                                              GGCCGTCCCAGATGTCCGGAAAGTCAAAGTCACTGTCAACTACCCGCCGTACATCTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACTGT 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               699;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                     1048
                                                                              1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                      920
                                                                                                                                                                                                                                           860
                                                                                                                                                                                                                                                                                                                                                   740
                                                                                                                                                                                                                                                                                                                                                                                                         680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                                                                                                          996
                                                                                                                                                             936
                                                                                                                                                                                                                 876
                                                                                                                                                                                                                                                                      816
                                                                                                                                                                                                                                                                                              800
                                                                                                                                                                                                                                                                                                                         756
                                                                                                                                                                                                                                                                                                                                                                               696
                                                                                                                                                                                                                                                                                                                                                                                                                                   636
                                                                                                                                                                                                                                                                                                                                                                                                                                                              620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
```

VERSION

```
B
                                     δÃ
                                                                            밁
                                                                                                          Qy
                                                                                                                                                    Дb
                                                                                                                                                                                  QУ
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                             Дδ
                                                                                                                                                                                                                                                                                                                               δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
       1105
                                                                            1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sig_peptide
                                                                                                                                                                                                                         925
                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                               865
                                         321
                                                                                                                261
                                                                                                                                                    985
                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                              81 aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
GTACGACGAGGCCCCTATACCTGCTGTGCAGACGGACAACCACCCCAAGACCTCCCG 1164
                    AGTGATCATCCTGGTGAACACGCCAACCCAGTACAGCATCATGATCCAGAACGTGGACGT 110
                                                                                                                                                                   otggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg 260
                                                                                                                                                                                                                                                   ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc 200
                                                                                                                                                                                                                                                                                           AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTTCCCAAGGCGATGGACAACGTGACGGT 924
                                                                                             cytgytccttctgagcaacaccccaaacgcagtacagcatcgagatccagaacgtggatgt 320
                                                                                                                                                                                                                    CCGGCAGGGGGAGAGCGCCACCCTCAGATGTACCATAGATGATCGGGTCACCCGGGTGGC
                                                                                                                                              CTGGCTGAACCGCAGCACCATCCTCTACGCCGGGAATGACAAGTGGTCCATAGACCCTCG
                                                                                                                                                                                                                                                                                                                                                                    703;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Schofield, P.R., McFarland, K.C., Hayflick, J.S., Wilcox, J.N., Cho, T.M., Roy, S., Lee, N.M., Loh, H.H. and Seeburg, P.H. Molecular characterization of a new immunoglobulin superfamily protein with potential roles in opioid binding and cell contact EMBO J. 8 (2), 489-495 (1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Data
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (23-AUG-1988) Schofield P.R 2 (bases 1 to 2593)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 2593)
Schofield, P.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cell adhesion molecule; glycoprotein; immunoglobulin membrane protein; opioid binding protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COW.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            X12672.1 GI:585 cell adhesion mo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             531
                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                kindly reviewed (19-may-1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /translation="MGVCGSLFQPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDN VTVRQGESATLRCTIDDRVTRVAMLNRSTILYAGNUKWSIDPRVIILVNTPTQYSIMI QNUDUYDEGPYTCSVQTDNHPKTSRVHLLIVQVPPQINNISSDUFVNEGSSYTLLCIAI GREBETYTWHALLSVKEGQGFVSEDEYLEISDIKRDQSGEVECSALNDVAADVRKVKI TVNYPPYISKAKNTGVSVGQKGILSCEASAVPMAEFQWFKEDTRLATGLDGMRIENKG HISTLTFFNVSEKDYGNYTCVATNKLGITNASITLYGPGAVIDGVNSASRALACLMLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="polyA site"
769 c 658 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product="put. OPCAM 2593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="putative"
866. .1819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTLFAHFFIKF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="put. pre-OPCAM (AA 1
/protein_id="CAA31192.1"
/db_xref="GI:586"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      785.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="lambda BOM159, lambda
/tissue_type="brain"
/clone_lib="lambda gt10."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Bos taurus"
/db_xref="taxon:9913"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="SWISS-PROT:P11834"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
                                                                                                                                                                                                                                                                                                                                                                                     52.4%;
73.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .1822
                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                   Score 540.6; DB 4; Pred. No. 3.8e-139;
                                                                                                                                                                                                                                                                                                                                                                  Mismatches 249;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (AA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              by Schofield P.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                318)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BOM106'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ī
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    345)"
                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                    2593;
                                                                                                                                                                                                                                                                                                                                                                ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          superfamily;
                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                              1044
                                                                                                                                                                                                                  984
                                                                                                                                                                                                                                                                                                                                                                1;
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RATCALMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                               MEDLINE
                                                                                                                                                                                   JOURNAL
                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1765 GCTCGCTTGCCTCTGGCTATCAGGGACCCTCTTTGCCCACTTCTTCATCAAGTTT 1819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1705 CAGCATCACACTGTATGGGCCTGGAGCCGTCATTGATGGTGTAAACTCGGCCTCTAGAGC 1764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1465 CAAAGCCAAGAACACAGGGGTCTCCGTTGGCCAGAAGGGCATCTTGAGCTGTGAAGCCTC 1524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1165 TGTCCACCTCATCGTGCAGGTCCCTCCCCCAGATCATGAACATCTCCTCAGATGTCACCGT 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1525 GGCAGTGCCCATGGCTGAGTTCCAGTGGTTCAAGGAAGACACCAGGCTGGCCACCGGCCT 1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1405 TGTTGCTGCCCCTGACGTGCGGAAAGTAAAGATCACTGTCAACTACCCCCCCTATATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1225 GAATGAGGGGAGCAGCGTGACCCTGCTGTGTCTTGCTATCGGCAGACCAGAGCCAAACGGT 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   858 tgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccacccaatgc 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       678 agaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctc 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501 tacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatactt 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441 taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggcaggctgcgtctggctgctgctcttctggtcttgcacctgcttctcaaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggag 977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGACGGCATGAGGATCGAGAACAAAGGCCACATATCCACGCTGACCTTCTTCAACGTCTC 1644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gaaaggggtgaaagtggaaaacagacctttccttctcaaaactcatcttcttcaatgtctc 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaa 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytygccycyccytygtacygayaytaaayytcaccytyaactatccaccatacatttc 677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAAATCTCTGACATCAAACGTGACCAGTCCGGGGAGTATGAGTGCAGCGCCTTGAATGA 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                               Gene 117
92347701
                                                                                                                                                                             Lippman, D.A., Lee, N.M. and Lo
Opioid-binding cell adhesion
rat brain cDNA library
Gene 117, 249-254 (1992)
                                                                                                                                                                                                                                                                                                                                                                         M88709.1 GI:203245
cell adhesion-like molecule; opioid binding protein.
celt adhesion-like molecule; opioid binding protein.
celt adhesion-like molecule; opioid binding protein.
                                                                                                                                                                                                                                                                                                                   Eukaryota;
                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus norvegicus cell
M88709
                                                                                                                                                                                                                                                                                                                                                                   mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RATCALMA
                                                                                                                                                                                                                                                                                    Rattus.
                                                                                                                                                                                                                                                                                                     Mammalia;
                                                                                                                                                                                                                                                            (bases 1 to 3069)
                                   /strain="Simonsen ICR"
/db_xref="taxon:10116"
/map="chromosome 9"
/tissue_type="brain"
/tissue_lib="UZ"
                                                                            /organism="Rattus norvegicus"
/strain="Simonsen ICR"
                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                   Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                     Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      3069 bp mRNA linear adhesion-like molecule mRNA,
                                                                                                                                                                                                                                       and Loh, H.
                                                                                                                                                                                                                      molecule (OBCAM)-related
                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ROD 08-MAY-1993
                                                                                                                                                                                                                      clones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                617
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
                                                                                                                                                                                                                      from
                                                                                                                                                                                                                                                                                                                                                                               ţ
```

```
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 723
     1356
                                                                                                                                1236
                                                                                                                                                                                                                                                                1116
                                                                                                                                                                                                                                                                                                                               1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
                                                                                                                                                               617
                                                                                                                                                                                                                                557
                                                                                                                                                                                                                                                                                              500
                                                                                                                                                                                                                                                                                                                                                             440
                                                                                                                                                                                                                                                                                                                                                                                            996
                                                                                                                                                                                                                                                                                                                                                                                                                                                            936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                            380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Sir
hes 723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
               cagcagtcccctcagcagaattcccagtggtacaaaggatgacaaaagactgattgaaggaa 796
                                                                                                                                                acgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacattt 676
                                                                                                                                                                                                                                                                             ttacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatact 556
                                                                                                                                                                                                                                                                                                                                              ttaatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacgg 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtgg
CTGCTGTCCCCATGGCTGAATTCCAGTGGTTCAAGGAAGATACCAGGTTAGCCACTGGCC
                                                             CAAAAGCGAAGAACACTGGCGTTTCAGTAGGCCAGAAGGGCATCCTGAGCTGTGAAGCCT
                                                                                         cagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcct 736
                                                                                                                             ATGTCGCTGCACCTGATGTTCGGAAAGTAAAAATCACTGTAAACTATCCTCCCTATATCT
                                                                                                                                                                                            TGGAAATCTCAGACATCAAACGCGACCAATCTGGAGAGTATGAGTGCAGCGCCTTGAATG 1235
                                                                                                                                                                                                                TGAATGAGATAAGCAGTGTGACCTTGTTATGTCTCGCAATTGGCAGACCAGAACCAACAG 1115
                                                                                                                                                                                                                                                                                                                                                                                        GGGTCCACCTCATAGTGCAAGTTCCTCCCCAGATAATGAACATCTCTTCAGACATTACTG 1055
                                                                                                                                                                                                                                                                                                                                                                                                              gggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatátctcca 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                         gcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatg 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTGGCTAAACCGCAGCACAATCCTCTACGCTGGGAATGACAAGTGGTCCATAGACCCTC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGAGTGCCGGTGCGCAGCGGAGATGCCACCTTTCCCCAAAGCTATGGACAACGTGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacgg 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATGTACCATCCCGCCTACTGGATCGTCTTCTCGGCCACCACTGCCCTGCTCTTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCGGCAGGGAGAGCGCCACCCTCAGGTGTACCATAGATGACCGGGTCACCAGGAGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    556. .603
/rpt_unit=556.
638. .1654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FIKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="g1:203246"
//translation="MYHPAYWIVFSATTALLFIPGVPVRSGDATEPKAMDNVTVRQGE
//translation="MYHPAYWIVFSATTALLFIPGVPVRSGDATEPKAMDNVTVRQGE
SATIRCTIDDRVTRVAMLNRSTILYAGNDKWSIDPRVIILVNTPTQVSIMIQNVDVVD
EGPYTCSVQTDNHPKTSRVHLIVQVPPQIMNISSDITVNEISSVTLLCILAIGREPFTV
TWRHLSVKEGQGFVSEDEYLEISDIKRDQSGEYECSALNDVAAPDVRKVKITVNYPPY
ISKAKNTGVSVGQKGILSCEASAVPMAEFQWFKEDTRATGILGVFLENKGRISTITF
ISKAKNTGVSVGQKGILSCEASAVPMAEFQWFKEDTRATGILGVFLENKGRISTITF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENVSEKDYGNYTCVATNKLGNTNASITLYGPGAVIDGVNSASRALACLWLSGTFFAHF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="cell adhesion-like molecule"
/protein_id="AAA40858.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      codon_start=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    787 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51.9%;
71.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 536; DB 10;
Pred. No. 7.4e-138;
0; Mismatches 290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 3069;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                             1295
1415
                                                              1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       815
                                                                                                                                                                                                                            616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     79
           Qy
                                                                        δõ
                                            Вb
                                                                                                         Db
                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            γQ
                                                                                                                                                                                                                                                                          BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HUMOBCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                           Matches
                                                                                                                                                                                            Best
                                                                                                                                                                                                        Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1416
           201
                                            191
                                                                                                          131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 797
                                                                        141
                                                                                                                                         81
```

밁 ΔÃ B Qy DЪ Qy DЪ Qy В Ş 밁 Qy 밁 Qy Db Qy Дb 2 DЪ 20 Вb QΥ Вb

망

```
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1596 CACTGGCTTGTCTCTGGCTCTCAGGGACCTTCTTTGCCCACTTCTTCATCAAGTTT
                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                           Match
ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                            CCGGCAGGGGGAGAGCGCCACCCTCAGGTGTACCATAGATGACCGGGGTAACCCGGGTGGC
                                                                                    AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCCAAAGCTATGGACAACGTGACGGT
                                                                                                                                                                   aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAGCATCACCCTGTATGGGCCTGGAGCAGTCATTGATGGTGTAAACTCGGCCTCTAGAG 1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgagga 976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacacccaatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gggcaggctgcgtctggctgctcttcttggtcttgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGATGGCGTGAGAATTGAGAACAAAGGCCGCATATCCACTTTGACTTTCTTCAATGTCT
                                                                                                                                                                                                                                    699;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
1 (bases 1 to 1478)
Shark, K.B. and Lee, N.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complete cds
L34774
                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 encoding a human opioid-binding cell adhesion molecule (OBCAM)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cloning, sequencing and localization to chromosome 11 of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        opioid-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (library:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               L34774.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HUMOBCAM
                                                                                                                                                                                                                                                                                                                                                           351
                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clone pHOM) opicid-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                       *C+TARS 14 TION= "MGVCGYLFLPWKCLVVSLRLLFLVPTGVPVRSGDATFPKAMDN VTVRGGESATLRCTI DDRYTRVAKLNRSTILYAGNDKWSI DDRYTI LIVNTPTQYSIMI ONVDVYDEGPYTCSVOTINDHEKTSRVHLI LIVQVPGDINI ISSDITVNEGSSVTLLCLAI GRPEPTVTWRHLSVKEGQGFVSEDEYLEISDIK KRDQSGEY ECSALNDVAAPDVRKVKI
                                                                                                                                                                                                                                                                                                                                                                               GTLLAHFFIKF"
                                                                                                                                                                                                                                                                                                                                                                                                RMSTLTFFNVSEKDYGNYTCVATNKLGNTNASITLYGPGAVIDGVNSASRALACLWLS
                                                                                                                                                                                                                                                                                                                                                                                                                        TVNYPPYISKAKNTGVSVGQKGILSCEASAVPMAEFQWFKEETRLATGLDGMRIENKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="opioid-binding cell adhesion molecule"
/protein_id="AAA36387.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GI:514373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="GI:514374"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tissue_type="occipital/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /map="chromosome 11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tissue_lib="Stratagene"
                                                                                                                                                                                                                                                 51.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cell
                                                                                                                                                                                                                                                                                                                                                           C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        adhesion molecule
                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                           Score 534.2; DB 9;
Pred. No. 2.1e-137;
0; Mismatches 253;
                                                                                                                                                                                                                                                                                                                                                         371 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stratagene brain)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata; Catarrhini; Hominidae
                                                                                                                                                                                                                                                                                                                                                         383 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cortex'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            adhesion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  occipital cortex cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hominidae;
                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            molecule
                                                                                                                                                                                                                                                                       1478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRI 21-JUL-1994
                                                                                                                                                                                                                             ς.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1651
                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA,
                                                                                                                                             190
                                                            250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   856
                   260
                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ţ
                                                                                                                                                                                                                               1;
```

```
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                      RATCALMB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B,
                                                                                        TITLE
                       MEDLINE
                                               JOURNAL
                                                                                                                  AUTHORS
                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              251
                                                                                                                                                                                                                                                                                                                                                                                                              14
ναses 1 to 2179)

Lippman, D.A., Lee, N.M. and Loh, H.H.

Opioid-binding cell adhesion molecu.

rat brain cDNA library

Gene 117, 249-254 (1997)

92347701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTGGCTTGTCTCTGGCTATCAGGGACCCTCTTAGCCCACTTCTTCATCAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggcaggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCATCACATTGTATGGGCCTGGAGCAGTCATTGATGGTGTAAACTCGGCCTCCAGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAAAAGGATTATGGGAACTATACTTGTGTGGCCACGAACAAGCTTGGGAACACCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    agcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAGCCAAGAACACTGGTGTTTCAGTCGGTCAGAAGGGCATCCTGAGCTGTGAAGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCGCTGCGCCCGATGTGCGGAAAGTAAAAATCACTGTAAACTATCCTCCCTATATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGATCTCTGACATCAAGCGAGACCAGTCCGGGGAGTACGAATGCAGCGCGTTGAACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACATGGAGACACCTGTCAGTCAAGGAAGGCCAGGGCTTTGTAAGTGAGGATGAGTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tacttggagacacatctctcccca---aagcggttggctttgtgagtgaagacgaatactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATGAGGGAAGCAGTGTGACCCTGCTGTGTCTTGCTATTGGCAGACCAGAGCCAACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGATGGAATGAGGATTGAAAACAAAGGCCGCATGTCCACTCTGACTTTCTTCAATGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCAGTCCCCATGGCTGAATTCCAGTGGTTCAAGGAAGCAAGGTTAGCCACTGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTTCACCTAATAGTGCAAGTTCCTCCTCAGATCATGAATATCTCCTCAGACATCACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGATCATCCTGGTCAATACACCCAACCCAGTACAGCATCATGATCCAAAATGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGCTAAACCGCAGCACCATCCTCTACGCTGGGAATGACAAGTGGTCCATAGACCCTCG
                                                                                                                                                                                                                      M88710.1 GI:203247

cell adhesion-like molecule; opioid binding protein cell adhesion-like molecule; opioid binding protei
                                                                                                                                                                                                   Rattus norvegicus (strain
Rattus norvegicus
Eukaryota; Metazoa; Chorda
                                                                                                                                                                                                                                                                                                              RATUALMUS 2179 bp mRNA linear Rattus norvegicus cell adhesion-like molecule mRNA, M88710
                                                                                                                                                                                                   Metazoa; Chordata;
                                                                                     molecule
                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae;
                                                                                   (OBCAM)-related
                                                                                                                                                                                                                                              ťô
                20
                                                                                                                                                                                                                                                                                                                               complete cds.
                                                                                                                                                                                                                                                                                                                                                         ROD 27-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1032
                                                                                   clones
                                                                                                                                                                                                                                              mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              310
                밁
                                                    δÃ
                                                                                                 망
                                                                                                                                          Qy
                                                                                                                                                                                         рь
                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                    D
                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뫄
                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                         738
                                                                                                    978
                                                                                                                                                                                            918
                                                                                                                                                                                                                                       618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       738
                                                                                                                                                                                                                                                                                    858
                                                                                                                                                                                                                                                                                                                                 558
                                                                                                                                                                                                                                                                                                                                                                               798
                                                                                                                                                                                                                                                                                                                                                                                                                          501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
       TGCTGTCCCCATGGCTGAATTCCAGTGGTTCAAGGAAGATACCAGGTTAGCCACTGGCCT
                                 agcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaa 797
                                                                                                                       agaagccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtgaagcctc 737
                                                                                                                                                                                                                 cytygccycycccytyytacygagaytaaayytcaccytyaactatccaccatacatttc 677
                                                                                                                                                                                                                                                                                                                                                                                                      tacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatactt 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                                                                 AAAAGCGAAGAACACTGGCGTTTCAGTAGGCCAGAAGGGCATCCTGAGCTGTGAAGCCTC
                                                                                                                                                                                       TGTCGCTGCACCTGATGTTCGGAAAGTAAAATCACTGTAAACTATCCTCCCTATATCTC
                                                                                                                                                                                                                                                                               GGAAATCTCAGACATCAAACGCGACCAATCTGGAGAGTATGAGTGCAGCGCCTTGAATGA
                                                                                                                                                                                                                                                                                                              ggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatga 617
                                                                                                                                                                                                                                                                                                                                                                          GAATGAGATAAGCAGTGTGACCTTGTTATGTCTCGCCAATTGGCCAGACCAGAACCAACAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTCCACCTCATAGTGCAAGTTCCTCCCCCAGATAATGAACATCTCTTCAGACATTACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGATCATCTTGGTCAACACGCCTACCCAGTACAGTATCATGATCCAGAATGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGCTAAACCGCAGCACAATCCTCTACGCTGGGAATGACAAGTGGTCCATAGACCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGGCAGGGAGAGAGCGCCACCCTCAGGTGTACCATAGATGACCGGGTCACCAGAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGAGTGCCGGTGCGCAGCGGAGATGCCACCTTTCCCAAAGCTATGGACAACGTGACGGT 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product="cell adhesion-like molecule"
/protein_id="AAA40859.1"
/protein_id="AAA40859.1"
/protein_id="AAA40859.1"
/db_xref="cul203248"
/translation="McGVCGYLFLPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDN
'TVRQCESATLRCTILDRYTFRVAKLNRSTILYAGNDKWSLDPRVILLVNTPTQVSIMI
ONUDVYDEGFYTGSVQTDNHPKTSRVHLIVQVPPQINNISSDITVNEISSYTLLCLAI
ONUDVYDEGFYTGSVQTDNHPKTSRVHLIVQVPPQINNISSDITVNEISSYTLLCLAI
GREEPTYTWRHLSVREGGGTVSEDEYLEISDIKRDQSGSYECSALMDVAAPDVRKVKI
TVNYPPYISKAKNIGVSVGCKGILSCEASAVEMAEFQWFKEDTRLATGLDGVRIENKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTFFAHFFIKF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RISTLTFINVSEKDYGNYTCVATNKLGNTNASITLYGPGAVIDGVNSASRALACLWLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   298.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /strain="Simonsen ICR"
/db_xref="taxon:10116"
/tissue_type="brain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
1. .2179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /codon_start=1
/product="cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50.2%;
72.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   493 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 518.2; DB 10
Pred. No. 6.2e-133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                263;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
```

977

917

857

797

737

677

380

617

557 260 497

2179 ω •• Gaps

۲.

```
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
 D)
                                Qy
                                                                      Вþ
                                                                                                      QΥ
                                                                                                                                              뫄
                                                                                                                                                                           V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D)
                                                                                                                                                                                                                                                                                                                                 BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                    Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1278 ACTGGCTTGTCTCTGGCTCTCAGGGACCTTCTTTGCCCCACTTCTTCATCAAGTTT 1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1218
 667
                                                                        607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           918
                                      201
                                                                                                          141
                                                                                                                                              547
                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15
                 ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                 aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggcaggctgcgtctggctgctctcttctggtcttgcacctgcttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGCATCACCCTGTATGGGCCTGGAGCAGTCATTGATGGTGTAAACTCGGCCTCTAGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccaccaccaatgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGATGGCGTGAGAATTGAGAACAAAGGCCGCATATCCACTTTGACTTTCTTCAATGTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gaaaggggtgaaagtggaaaacagacctttcctctccaaaactcatcttcttccatgtctc
CTGGCTAAACCGCAGCACAATCCTCTACGCTGGGAATGACAAGTGGTCCATAGACCCTCG
                                                                      CCGGCAGGGAGAGCGCCACCCTCAGGTGTACCATAGATGACCGGGTCACCAGAGTAGC
                                                                                                      ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc
                                                                                                                                              AGGAGTGCCGGTGCGCAGCGGAGATGCCACCTTTCCCCAAAGCTATGGACAACGTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cell adhesion-like molecule; opioid binding protein. Rattus norvegicus brain cDNA to mRNA. Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RATUALMC 2337 bp mRNA linear Rattus norvegicus cell adhesion-like molecule mRNA, M88711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lippman, D.A., Lee, N.M. and Loh, H.H.
Opioid-binding cell adhesion molecule (OBCAM)-related clones from rat brain cDNA library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  м88711.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus
                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases
                                                                                                                                                                                                                                                                                                                                 581
                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                117, 249-254 (1992)
                                                                                                                                                                                                                                                                                                                                                                                /product="cell adhesion-like molecule"
/protein_id="AAA40860.1"
/protein_id="AAA40860.1"
/protein_id="AAA40860.1"
/db_xref="ell-203250"
/translation="MGVCGYLFLPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDN
/Translation="MGVCGYLFLPWKCLVVVSLRLLFLVPTGVPVRSGMINUVXSTMI
/TVRVGESATLRCTIDDRYTRVAWLNRSTILLAGNDWGS LDRYLITLUNTPTQVSIMI
ONDVYDEGPYTCSVQTDNHPKTSRVHLIVQVPPQINNISSDITVNEISSVTLLCLAI
GREEPTVTWRHLSVKEGGGFVSEDEYLEISDLKRDOSGEYECSALNDVAAPDVRKVKI
TVNYPPYISKAKNTGVSVGQKGILSCEASAVPMAEFQWFKEDTRLATGLDGVRIENKG
                                                                                                                                                                                                                                                                                                                                 GTFFAHFFIKF"
1 578 C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="brain"
467. .1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:203249
                                                                                                                                                                                                                                                                                                                                                                   RISTLTFFNVSEKDYGNYTCVATNKLGNTNASITLYGPGAVIDGVNSASRALACLWLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
1. .2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:10116"
/map="chromosome 9"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 to 2337)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Rattus norvegicus"
                                                                                                                                                                                                                                     50.2%;
72.1%;
                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                    Score 518.2; DB 10;
Pred. No. 6.3e-133;
0; Mismatches 263;
                                                                                                                                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                 657
                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                        2337;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ROD 08-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032
                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1157
                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         857
                                                                      666
                                                                                                                                              606
                                                                                                                                                                                                                  1;
```

망 ΩV 밁 δÃ g Qy 밁 Qy B δõ 밁 QΥ DЪ Qy 밁 Ωy 밁 δÃ D ΩV В 2 Ş B 20 1207 1147 1087 1027 1447 1387 1327 618 967 907 441 847 787 321 727 798 558 501 381 tacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatactt 557 GAATGAGATAAGCAGTGTGACCTTGTTATGTCTCGCAATTGGCAGACCAGAACCAACAGT taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 500 cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 320 TGTCGCTGCACCTGATGTTCGGAAAGTAAAAATCACTGTAAACTATCCTCCCTATATCTC GGAAATCTCAGACATCAAACGCGACCAATCTGGAGAGTATGAGTGCAGCGCCTTGAATGA ggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatga GGTCCACCTCATAGTGCAAGTTCCTCCCCAGATAATGAACATCTCTTCAGACATTACTGT ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat 440 AAAAGCGAAGAACACTGGCGTTTCAGTAGGCCAGAAGGGCATCCTGAGCTGTGAAGCCTC agaagccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtgaagcctc cgtggccgcgcgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttc AGTGATCATCTTGGTCAACACGCCTACCCAGTACAGTATCATGATCCAGAATGTGGATGT ggcaggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattt 1032 cagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggag tgaacatgactatgggaactacacttgcgtggcctccaacagctgggccacaccaatgc gaaaggggtgaaagtggaaaacagacctttccttccaaaactcatcttcttccattgtctc TGCTGTCCCCATGGCTGAATTCCAGTGGTTCAAGGAAGATACCAGGTTAGCCACTGGCCT 1266 agcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaa 797 ACTGGCTTGTCTCTGGCTCTCAGGGACCTTCTTTGCCCCACTTCTTCATCAAGTTT CAGCATCACCCTGTATGGGCCTGGAGCAGTCATTGATGGTGTAAACTCGGCCTCTAGAGC GGATGGCGTGAGAATTGAGAACAAAGGCCGCATATCCACTTTGACTTTCTTCAATGTCTC 1326 1206 1146 1026 906 846 786 1446 977 1386 857 617 966 380 917 737 677 1086

Search completed: July 11, 2002, 22:51:36
Job time: 13435 sec

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   on:
                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                  926.5
923.5
923.5
923.5
923.5
923.5
923.5
902.3
905.9
907.9
907.7
907.5
796.5
796.5
796.5
261.6
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
256.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
266.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Issued_Patents_AA:*
1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
5: /cgn2_6/ptodata/2,
6: /cgn2_6/ptodata/2,
              551.3
551.1
551.1
551.1
550.3
550.3
550.3
550.3
550.3
550.3
113.3
550.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
113.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       July 11, 2002, 22:58:27; Search time 66.43 Seconds (without alignments) 126.485 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         231628 seqs, 24425594 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-700-397-3
1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MKTIQPKMHNSISWAIFTGL.....RRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/B_CTUS_COMB.pep:*
/cgn2_6/ptodata/2/iaa/Dackfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
              DB
       US-08-414-657D-42
US-08-414-657D-43
US-08-414-657D-43
US-08-414-657D-45
US-08-414-657D-46
US-08-414-657D-46
US-08-414-657D-46
US-08-414-657D-49
US-08-414-657D-49
US-08-414-657D-59
US-08-414-657D-59
US-08-414-657D-59
US-08-414-657D-59
US-08-414-657D-59
US-08-414-657D-59
US-08-414-657D-59
US-08-414-657D-51
US-08-659-984A-1
US-08-659-984A-5
US-08-659-984A-5
US-08-659-984A-5
US-08-60-531-5
US-08-60-531-5
US-08-60-531-5
US-08-60-531-5
US-08-60-31-5
US-08-60-31-5
US-08-60-31-5
US-08-752-307B-12
US-08-408-420A-6
US-08-752-307B-8
US-08-752-307B-8
US-08-414-657D-50
US-08-414-657D-50
US-08-414-657D-50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           231628
   sequence
seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Description
## 42 Appl
## 47 Appl
## 47 Appl
## 47 Appl
## 48 Appl
## 49 Appl
## 57 Appl

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RES
US-
                                                                                                                                             Sn
       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            מש
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74444333333333322
744443333333333228
7443210383763331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        230.5
230.5
229.5
229.5
225.5
225.5
225.5
225.5
219
219
210
211
208.5
205.5
205.5
207.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12.8
12.8
12.7
12.7
12.5
12.5
12.5
12.5
12.5
12.5
12.5
12.1
11.0
11.0
11.0
10.0
10.0
```

Query Match 51.3%; Score 926.5; DB 2; Le Best Local Similarity 55.1%; Pred. No. 1.3e-84;	Sequence 42, Application US/08414657D Sequence 42, Application US/08414657D Sequence 42, Application US/08414657D Sequence 42, Application US/08414657D Seatent No. 5861283 GENERAL INFORMATION: APPLICANT: Levitt, Pat APPLICANT: Pimenta, Aurea APPLICANT: Pimenta, Aurea APPLICANT: Pimenta, Aurea APPLICANT: Pimenta, Victoria TITLE OF INVENTION: Limbic System-Associated Membrane TITLING DATE: Jamane System	ALIGNMENTS	28 230.5 12.8 868 1 US-08-374-834-1 29 230.5 12.8 868 2 US-08-644-271-1 30 229.5 12.7 869 1 US-08-374-834-16 31 229.5 12.7 869 2 US-08-644-271-29 32 225.5 12.5 478 5 PCT-US95-08493-15 33 225.5 12.5 860 5 PCT-US95-08493-19 34 225.5 12.5 868 5 PCT-US95-08493-21 35 219 12.1 1091 3 US-08-986-485-2 36 219 12.1 1101 3 US-08-986-485-2 37 213 11.8 59 2 US-08-414-657D-53 38 212 11.7 59 2 US-08-414-657D-53 39 211 11.7 615 2 US-08-752-3078-9 40 208.5 11.5 1651 4 US-09-540-245A-18 41 205.5 11.4 596 2 US-08-752-3078-13 42 201 11.1 946 5 PCT-US95-08493-13 43 199 11.0 1241 4 US-09-040-774-2 44 197.5 10.9 1447 5 PCT-US95-0849-13
Length 338;	ă		Sequence 1, Appli Sequence 1, Appli Sequence 29, Appl Sequence 29, Appli Sequence 15, Appli Sequence 17, Appli Sequence 5, Appli Sequence 5, Appli Sequence 52, Appli Sequence 53, Appli Sequence 9, Appli Sequence 18, Appli Sequence 11, Appli Sequence 13, Appli Sequence 13, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli

Qy DЬ Qγ 밁 2 밁 Ωy 밁

DЪ

5 Gaps

4;

```
US-08-414-657D-43
    US-08-414-657D-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 43,
Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA
                                                                                                      SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
CITY: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139 VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314 I-NGSISLAVPLWLLAASLFCLLSK 337
                                         TYPE: amino acid
STRANDEDNESS: sin
                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17
                          TOPOLOGY:
                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG 78
                                                                                                                                                                   TELEFAX:
                                                                                                                                                                                       TELEPHONE:
                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DTR-INSANGLEIKSTEGQSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNISSDYTYNEGSNYTLYCMANGRPEPYITWRHLTPLGREFEGEEEYLEILGITREQSGK 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HDKWSLDPRVELEKRHALEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LRLLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVVEDKNSKVAWLNRSGIIFAG 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         179; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/08414657D
                                                                              338 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pimenta, Aurea
Fischer, Itzhak
Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  997 Lenox Drive, Building 3, Suite 210
                                                                                                                                                                   609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SYSTEM: DOS
FastSEQ for Windows Version
                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dechert Price & Rhoads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diskette
                                                                                                                                                                                                                                                                                                                                                                                                  31-MAR-1995
                                         single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                        US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60; Mismatches
                                                                                                                                                                                                                                   317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-414-657D-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 179; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building 3, Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-A:
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            195 YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  135 SNISSDYTVNEGSNYTLVCMANGRPEPVITWRHLTPLGREFEGEEEYLEILGITREQSGK 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             314 I-NGSISLAVPLWLLAASLFCLLSK 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  319 VSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199 YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    139 VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   259 DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/414,657D FILING DATE: 31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 997 Lenox Di
CITY: Lawrenceville
STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG 78
                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       79 NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 LRLLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVVEDKNSKVAWLNRSGIIFAG 74
                                                               TELEX:
                                                                              TELEFAX:
                                                                                                                                           REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DTR-INSANGLEIKSTEGOSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HDKWSLDPRVELEKRHALEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08543
325 amino acids
                                                                                609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                            FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                    IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                       Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51.3%; Score 926.5; DB 2 55.1%; Pred. No. 1.3e-84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        System-Associated Membrane
                                                                                                                                                317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
```

4;

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-414-657D-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-414-657D-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 41, Appli
Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                            ATTORNEY/AGENT INFORMATION: NAME: Bloom, Allen
                                                                                                                                         SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/414,657D FILING DATE: 31-MAR-1995 CLASSIFICATION: 435 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Levitt, Pat APPLICANT: Pimenta, Au
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: FRAGMENT TYPE:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              307 I-NGSISLAVPLWLLAASLL 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             128 SNISSDYTVNEGSNYTLYCMANGRPEPVITWRHLTPTGREFEGEEBYLEILGITREQSGK 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     319 VSNGTSRRAGCVWLLPLLVL 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                248 DTR-INSANGLEIKSTEGOSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188 YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199 YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    139 VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     79 NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: single
                   REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 317743-102
                                                                                                                                                                                                                                                                      OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                          COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 LRILCCLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVLEDKNSKVAWLNRSGIIFAG 67
                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DKRLIEGKKGYKVENRPFLSKLIFFNYSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HDKWSLDPRVELEKRHSLEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI 127
                                                                                                                                                                                                                                                                                                                                                      08543
                                                                                                                                                                                                                                                                                                                                                                                                                  Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                               Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                        997 Lenox Drive, Building 3, Suite 210
                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                     IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dechert Price & Rhoads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
internal
                                                                                                                                                                                                                                                                                                               Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51.1%;
55.3%;
                                                                                                                                                                                                                                                                      DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Pred. No. 2.4e-84; 60; Mismatches 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 923.5; DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 3.25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4;
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       νQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-414-657D-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-414-657D-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 60, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity Matches 177; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Levil, Aurea APPLICANT: Pimenta, Aurea APPLICANT: Fischer, Itzhak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 325 amino acids
                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
ATTORNEY/AGENT INFORMATION
                                                                                                                                       CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
TELEFAX: 6
                                                                                                                                                     COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    307 I-NGSISLAVPLWLLAASLL 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           319 VSNGTSRRAGCYWLLPLLVL 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                248 DTR-INSANGLEIKSTEGQSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259 DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            188 YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199 YECSASNDVAAPVVRRYKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          128 SNISSDYTVNEGSNYTLYCMANGRPEPYITWRHLTPTGREFEGEEEYLEILGITREQSGK 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               139 VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    68 HDXWSLDPRVELEKRHSLEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI 127
                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             79 NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX:
                                         APPLICATION NUMBER:
                                                                                                      FILING DATE:
                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                ZIP: 08543
                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                   STATE:
                                                                                                                                                                                                                                                                                                                          CITY:
                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 LRLLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVLEDKNSKVAWLNRSGIIFAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 LAALCLE-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG 78
                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                       Lawrenceville
                                                                                                                                                                                                                                                                                                     Ŋ
                                                                                                                                                                                                                                                                                                                                        E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : 609-520-3214
609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                     Diskette
                                                                                                  31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                51.1%; Score 923.5; DB 2; 55.3%; Pred. No. 2.4e-84;
                                                                                                                       US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41:
                                                                                                                                                                                                                                                                                                                                          Building
                                                                                                                                                                                                                                                                                                                                          ζ
                                                                                                                                                                                                                                                                                                                                            Suite
                                                                                                                                                                                                                                                                                                                                            210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 325;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ن.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67
```

```
Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-414-657D-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ър
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-414-657D-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 179; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 46,
                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Au
APPLICANT: Fischer, It.
                                             SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Limbic System-A
                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314 I-NGSISLAVPLWLLAASLLCLLSK 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      319 VSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139 VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: sin
FILING DATE: 3:
CLASSIFICATION:
                                                                                                                                                   ZIP:
                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                  CITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 LAALCLE-QGVPVRSGDATEPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Bloom, Allen REGISTRATION NUMBER:
                               APPLICATION NUMBER:
                                                                              OPERATING SYSTEM:
                                                                                                   COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DTR-INSANGLEIKSTEGQSSLTVTMVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNISSDYTVNEGSNYTLYCMANGRPEPYITWRHLTPTGREFEGEEEYLEILGITREQSGK 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HDKWSLDPRVELEKRHSLEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LRLLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVLEDKNSKVAWLNRSGIIFAG 74
                                                                                                                                                   08543
                                                                                                                                                                                                  Lawrenceville
                                                                                                                                                                                  Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             338 amino acids
                                                                                                                                                                                                                                                                                                                Pimenta, Aurea
Fischer, Itzhak
Zhukareva, Victoria
                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                            IBM Compatible
                                                                                                                 Diskette
              31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                Dos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           51.1%; Score 923.5; DB 2; 55.1%; Pred. No. 2.5e-84;
                                                                                                                                                                                                                                                                                                  Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                    60
                                 US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  317743-102
                                                                                                                                                                                                                  ω
                                                                                                                                                                                                                   Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 338;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                    GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          79
```

```
US-08-414-657D-47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-414-657D-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 47,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                       APPLICANT: Levitt, Pat
APPLICANT: Fischer, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Fischer, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
NUMBER OF SEQUENCES: 60
                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
COMPUTER: IBM Compat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 307 IN 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           319 VS 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              259 DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128 SNISSDYTVNEGSNYTLYCMANGRPEPVITWRHLTPTGREFEGEEEYLEILGITREQSGK 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Bloom, Allen REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                    STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 LRLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVLEDKNSKVAMLNRSGIIFAG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
  SOFTWARE:
                         OPERATING SYSTEM:
                                                                                                            ZIP: 08543
                                                                                                                                   COUNTRY:
                                                                                                                                                        STATE: NJ
                                                                                                                                                                               CITY: Lawrenceville
                                                                                                                                                                                                    ADDRESSEE: Dechert Price & Rhoads STREET: 997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 LAALCLF-QGVPVRSGDATFPKAMDNYTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YECSASNDVAAPVVRRVKYTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DTR-INSANGLEIKSTEGQSSLTVTNYTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HDKWSLDPRVELEKRHSLEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tch 50.3%; al Similarity 56.3%; 170; Conservative 58
                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       308 amino acids
                                                                                                                                      USA
FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                         IBM Compatible
                                                                   Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 908; DB 2;
Pred. No. 7.8e-83;
8; Mismatches 70;
                                                                                                                                                                                                    3, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 308;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
```

Ψ

```
Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Βb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                              US-08-414-657D-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-414-657D-47
                                                                                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                                                                                                                          Sequence 45, Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                   APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                           314 IN 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                               319 VS 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      255 DTR-INSANGLEIKSTEGQSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      259 DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         135 SNISSDVTVNEGSNVTLVCMANGRPEPVITWRHLTPLGREFEGEEEYLEILGITREQSGK 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199 YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             139 VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX:
                                                                      CITY: Lawrenceville
                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        79 NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 LRLLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVVEDKNSKVAWLNRSGIIFAG 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Bloom, Allen REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                    COUNTRY:
                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YECKAANEVSSADVKQVKYTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HDKWSLDPRVELEKRHALEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI 134
                                                                                                                                                                                                                                                                                                            5861
                    08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  amino acid
                                                      Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  315 amino acids
                                                                                          997 Lenox Drive, Building 3, Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   609-520-3259
                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                            Dechert Price & Rhoads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50.2%; Score 907; DB 2 56.3%; Pred. No. 1e-82;
                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2; Length 315;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  χ
                                                                                                                                                                                                                                                                   US-08-414-657D-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-414-657D-45
                                                                                                                                                                                                                             Sequence 44, Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                             APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 310 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: 509-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                        CORRESPONDENCE ADDRESS:
                                                                                            TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION: NAME: Bloom, Allen
                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                               297
                                                                                                                                                                                                                                                                                                                                                                                   331
                                                                                                                                                                                                                                                                                                                                                                                                                      238
                                                                                                                                                                                                                                                                                                                                                                                                                                                          271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                211 VVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIEGKKGVK 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           151 NNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGDYECSASNDVAAP 210
STREET: 997 Lenox Dr
CITY: Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 31-MAR CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31 VRSGDATFFKAMDNYTVRQGESATLRCTIDNRYTRVAMLNRSTILYAGNDKWCLDPRVYL 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 29 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER:
                                       ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                 WLLPLLVLHLLLK 343
                                                                                                                                                                                                                                                                                                                                                                                                                  LSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEG 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VRSVD--FNRGTDNITVRQGDTAILRCVVEDKNSKVAWLNRSGIIFAGHDKWSLDPRVEL 58
                                                                                                                                                                                                                                                                                                                                               WLLAASLFCLLSK 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                      VENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHINASIMLFGPGAVSEVSNGTSRRAGCV 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRDDTR-INSANGLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNVTLVCMANGRPEPVITWRHLTPLGREFEGEEEYLEILGITREQSGKYECKAANEVSSA 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EKRHALEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKISNISSDVTVNEG
                                                                                                                                                                                                                               4, Application US/08414657D 5861283
                   E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        50.1%; Score 905; DB 2; Lery ... - 55.3%; Pred. No. 1.6e-82; Indels
                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            317743-102
                   3, Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
```

ω

237

Ŋ

```
DЬ
                                                                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                         QΨ
                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                    ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
                                                                                                                                                                                                 US-08-414-657D-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-414-657D-44
                                                                                                                                                             Sequence 48, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 49.9%; Score 902; DB 2; Best Local Similarity 55.5%; Pred. No. 3.1e-82;
                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 304 amino acid
APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itahak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                   297 WLLAASLL 304
                                                                                                                                                                                                                                                                                                                         331 WLLPLLVL 338
                                                                                                                                                                                                                                                                                                                                                                238 IKSTEGQSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRGI-NGSISLAVPL 296
                                                                                                                                                                                                                                                                                                                                                                                        271 VENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSEVSNGTSRRAGCV 330
                                                                                                                                                                                                                                                                                                                                                                                                                                              179 DVKOVKVTVNYPPTITESKSNEATTGROASLKCEASAVPAPDFEWYRDDTR-INSANGLE 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       211 VVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDLKRLIEGKKGVK 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119 SNVTLVCMANGRPEPVITWRHLTPTGREFEGEEEYLEILGITREQSGKYECKAAMEVSSA 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     151 NNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGDYECSAS/NDVAAP 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31 VRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVVL 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            سر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEG 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EKRHSLEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKISNISSDVTVNEG 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VRSVD--FNRGTDNITVRQGDTAILRCVLEDKNSKVAWLNRSGIIFAGHDKWSLDPRVEL 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FastSEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UMBER: US/08/414,657D
31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DOS
for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 304;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ω
```

```
B
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                    US-08-414-657D-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-414-657D-48
                                                                                                                                               Sequence 49, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 3177
TELECOMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
TELEFAX: 609-520-3259
             APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aura
APPLICANT: Fischer, Itzi
APPLICANT: Zhukareva, V
TITLE OF INVENTION: Limb
TITLE OF INVENTION: Pro-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building 3, Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 287 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 31-MAR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                               238 IKSTEGQSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRGIN 287
                                                                                                                                                                                                                                                                                 179 DVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRDDTR-INSANGLE 237
                                                                                                                                                                                                                                                                                                                                                                                                               119 SNVTLVCMANGRPEPVITWRHLTPTGREFEGEEEYLEILGITREQSGKYECKAANEVSSA 178
                                                                                                                                                                                                                                                                                                                                                                                                                                        151 NNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGDYECSASNDVAAP 210
                                                                                                                                                                                                                                                                                                                                                                        211 VVRRVKYTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIEGKKGVK 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 997 Lenox Dr
CITY: Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   59 EKRHSLEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKISNISSDVTVNEG 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31 VRSGDATFPKAMDNYTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVVL 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM COT
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEG 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     287 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                    Pimenta, Aurea
Fischer, Itzhak
Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    single
Protein and DNA
60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49.1%; Score 886.5; 56.6%; Pred. No. 1e-
                                  Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          le-80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 287;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ς.
```

2

31-MAR-1995

317743-102

US/08/414,657D

Suite

210

```
Вр
                                                                                                                                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                 US-08-414-657D-56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-414-657D-49
                                                                                                                                                         Sequence 56, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31'
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
                                                             APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                         TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                               271 VENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSEVS 320
                                                                                                                                                                                                                                                                                                                                                     179 DVKQVKYTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRDDTR-INSANGLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                 211 VVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIEGKKGVK 270
                                                                                                                                                                                                                                                                                                                                                                                                                             119 SNVTLVCMANGRPEPVITWRHLTPLGREFEGEEEYLEILGITREQSGKYECKAANEVSSA 178
                                                                                                                                                                                                                                                                             238 IKSTEGQSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRGIN 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 31-MAF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 99/ LC....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91 LSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEG 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59 EKRHALEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKISNISSDVTVNEG 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31 VRSGDATFPKAMDNYTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVVL 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Dechert Price & Rhoads STREET: 997 Lenox Drive, Building 3, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 VRSVD--FNRGTDNITVRQGDTAILRCVVEDKNSKVAWLNRSGIIFAGHDKWSLDPRVEL 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               287 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                       Limbic System-Associated Membrane Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49.0%; Score 885.5; DB 2 56.6%; Pred. No. 1.3e-80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sog
         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             49:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2; Length 287;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                       237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
Patent No. 5861283
GENERAL INFORMATION:
APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Enukareva, Victoria
TITLE OF INVENTION: Limbic System
TITLE OF INVENTION: Protein and I
NUMBER OF SEQUENCES: 60
                                                                                                                                                                       US-08-414-657D-57; Sequence 57; Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                           ΩV
                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-414-657D-56
                                                                                                                                                                                                                   RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 144;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastsEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                               290 YGNYTCVASNKLG 302
                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                         230
                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 99, LCCCITY: Lawrenceville
                                                                                                                                                                                                                                                                         240 YGNYTCVAANKLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Bloom, Allen REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 31-MAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50 GESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYD 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GDTAILRCVLEDKNSKVAWLNRSGIIFAGHDKWSLDPRVELEKRHSLEYSLRIQKVDVYD 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ropology:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     RHISPKAVGFVSEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAK 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EGPYYCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTW 169
                                                                                                                                                                                                                                                                                                                                                   SNEATTGRQASLKCEASAVPAPDFEWYRDDTR-INSANGLEIKSTEGQSSLTVTNVTEEH 239
                                                                                                                                                                                                                                                                                                                                                                                       GTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHD 289
                                                                                                                                                                                                                                                                                                                                                                                                                             RHLTPTGREFEGEEEYLEILGITREQSGKYECKAANEVSSADVKQVKVTVNYPPTITESK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EGSYTCSVQTQHEPKTSQVYLIVQVPPKISNISSDVTVNEGSNVTLVCMANGRPEPVITW 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               252 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
```

single

44.1%; Score 796.5; DB 2 56.9%; Pred. No. 8.5e-72; ative 50; Mismatches 58

DB 2; 58;

Length 252; Indels

۲. Gaps

1;

252

Protein and DNA 60

Limbic System-Associated Membrane

9;

```
Дb
                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                            US-09-540-245A-15; Sequence 15, Application US/09540245A; Patent No. 6270984
                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: US-08-414-657D-57
                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 144; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                   APPLICANT: Brose, Katja
APPLICANT: Tessier-Lavigne, Marc
TITLE OF INVENTION: Modulating Robo: Ligand Interactions
FILE REFERENCE: B98-031-3
CURRENT APPLICATION NUMBER: US/09/540,245A
                                                                                                       APPLICANT:
                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS LENGTH: 252 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                              240 YGNYTCVAANKLG 252
                                                                                                                                                                                                                                                                                                                                    290 YGNYTCVASNKLG 302
                                                                                                                                                                                                                                                                                                                                                                                181 SNEATTGRQASLKCEASAVPAPDFEWYRDDTR-INSANGLEIKSTEGQSSLTVTNVTEEH 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 RHLTPLGREFEGEEEYLEILGITREQSGKYECKAANEVSSADVKQVKVTVNYPPTITESK 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170 RHISPKAVGFVSEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAK 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           110 EGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEFTVTW 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 997 Lenox D:
CITY: Lawrenceville
STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 31 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 EGSYTCSYQTQHEPKTSQVYLIVQVPPKISNISSDVTVNEGSNVTLVCMANGRPEPVITW 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building 3, Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         50 GESATLRCTIDNRYTRYAWLNRSTILYAGNDKWCLDPRYVLLSNTQTQYSIEIQNVDVYD 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GDTAILRCVVEDKNSKVAWLNRSGIIFAGHDKWSLDPRVELEKRHALEYSLRIQKVDVYD 60
                                                                                                                                                                                                                                                                                                                                                                                                                        GTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHD 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amino acid
                                                                                                       Kid, Thomas
                                                                                                                         Goodman, Corey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             252 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          44.0%; Score 795.5; DB 2; 56.9%; Pred. No. 1.1e-71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      50; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                   486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ...th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ۳,
```

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-540-245A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-659-984A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Pate
SEQ ID NO 15
LENGTH: 1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/08659984A Patent No. 5942400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 14.5%; Score 261; DB 4; Length 1395; Best Local Similarity 26.1%; Pred. No. 5.7e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2000-03-31
PRIOR APPLICATION NUMBER: 60/065,544
PRIOR FILING DATE: 1997-11-14
PRIOR APPLICATION NUMBER: 60/081,057
PRIOR FILING DATE: 1998-04-07
NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: APPLICANT:
                                       CLASSIFICATION: 436
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
                                                                                                                              CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             477 KWFHDGHAVQAGNRYSIIQG----SSLRVDDLQLSDSGTYTCTASGERGETSWAATLIVE 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 418 VCSAFSVVDSSTVRVFLQVSSVDERPPPIIQIGPANQT-LPKGSVATLPCRATGNPSPRI 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    149 EGNNISLTCIATGRPEPTVTWRHISPKAVGF-----VSEDEYLEIQGITREQSGDY 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         257 FMKEPKDQVMLYGQTATFHCSVGGDPPPKVLWKKEEGNIPVSRARILH----- 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           533 KPGSTS 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  312 GPGAVS 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254 QWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTN--ASIMLF 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             200 ECSASNDVAAPVVR---RVKVTVNYPP---YISEAKGTGVPVGQKGTLQCEASAVPSAEF 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          358 LNGVVQLPCMASGNPPPSVFWTKEGYSTLMFPNSSHGRQYVAADGTLQITDVRQEDEGYY 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38 FPKAMDNVTVROGESATLRCTI-DNRVTRVAW------LNRSTILYAGNDKWCLDPRV 88
                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                     ZIP:
                                                                                                                                                                                                                                                                                                                              STREET: Two Embarcac
CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            89 VILSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISIN 148
                                                                                        FILING DATE:
                                                                                                           APPLICATION NUMBER:
                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                        COUNTRY: USA
                                                                                                                                                                                                                                                                                                               STATE:
FILING DATE:
                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----DEKSLEISNITPTDEGTYVCEAHNNVGQISARASLIVHAPPNFTKRPSNKKVG 357
                                                                                                                                                                                                                                                                     94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                  California
                                                                                                                                                                                                                                                                                                                                                          Two Embarcadero Ctr., 8th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                           Jacobson-Croak, Kirsten L.
VENTION: Assays for Detecting Beta-Secretase
VENTION: Inhibition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sinha, Sukanto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anderson, John P.
07-JUN-1995
                                                                                      07-JUN-1996
                  US 08/485,152
                                                                                                           US/08/659,984A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49; Mismatches 127; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
```

```
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-659-984A-1
                                           Qy
                                                                                               Вρ
                                                                                                                                          Qy
                                                                                                                                                                                           DЪ
                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                         24
                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dβ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:

NAME: Heslin, James M.

REGISTRATION NUMBER: 29,541

REFERENCE/DOCKET NUMBER: 15270-002810US

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-326-2400

TELEPHONE: 415-326-2400

TELEPHONE: 415-326-2400

TELEPAX: 415-326-2400

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:
LENGTH: 421 amino acids

TELEPHONE: 421 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 14.2%; Score 256; DB 2; Length 421; Best Local Similarity 26.7%; Pred. No. 2.7e-17; Matches 92; Conservative 54; Mismatches 126; Indels 72; Gaps
282 CEATNTIGQSSAEYVLI----VHDVPN-----TLLPTTII 312
                                                                                                                                                                                                174 LDFRVDRSDDGVAVICRVDHESLNATPQVAMQVLEIHYTPSVKIIPSTPFPQEGQPLILT 233
                                                                                                                                                                                                                                                                                               123 MEGDLMQLTCKTSGSKPAADIRW-----FKNDKEIKDVKYLKEEDANRKTFTVSST 173
                                              295 CVASNKLGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVL 338
                                                                                               234 CESKGKPLPEPVLWTKDGGELPDPDRMVVSGRE------LNILFLN--KTDNGTYR 281
                                                                                                                                               243 CEASAVPSAE-FOWYKD------DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYT 294
                                                                                                                                                                                                                                               198 -DYECSASND-----
                                                                                                                                                                                                                                                                                                                                              148 NEGNNISLTCIATG-RPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSG------ 197
                                                                                                                                                                                                                                                                                                                                                                                                 64 ELVRASWHELSISVSDVSLSDEGQYTCSLFT-MPVKTSKAYLTVLGVPEKPQISGFSSPV 122
                                                                                                                                                                                                                                                                                                                                                                                                                           89 VILSNTQTQYSIETQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDIS-I 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ----VAAPVVRRVKVTVNYPPYISEAKGTGVP-VGQKGTLQ 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16;
```

Search completed: July 12, 2002, 00:34:57 Job time: 5790 sec

```
Minimum DB seq
Maximum DB seq
                                                                                               Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                     No.
                                                                                                                                      pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                     Score
                                 1806
1806
1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           length: 0
length: 2000000000
                                                                                     Match
                                                                                                                                                                                   100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           July 12, 2002, 00:25:57; Search time 277.62 Seconds (without alignments) 436.140 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pending_Patents_AA_Main:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-700-397-3
1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3502263 seqs, 351980561 residues
                                                                                                                                                                                                                       GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MKTIQPKMHNSISWAIFTGL......RRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                    /cgn2_6/ptodata/2/paa/PCTUS_COMB.pep:*
                                                                                                                                                                                /cgn2_6/ptodata/2/paa/US099_COMB.pep:*
/cgn2_6/ptodata/2/paa/US101_COMB.pep:*
/cgn2_6/ptodata/2/paa/US101_COMB.pep:*
/cgn2_6/ptodata/2/paa/US60_COMB.pep:*
                                                                                     Length
   344
344
344
344
344
                                                                                      멂
    17
23
23
23
23
23
 US-09-380-138-523

US-09-700-397-3

US-09-918-585A-523

US-09-978-188A-523

US-09-978-191A-523

US-09-978-191A-523

US-09-978-191A-523
                                                                                      IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3502263
                                                                                     Description
Sequence 523, Appli
Sequence 3, Appli
Sequence 523, App
Sequence 523, App
Sequence 523, App
Sequence 523, App
```

1799	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	
99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
344	in.	4	4	4	4	4	4	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	
19	ب 8	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	
09-544-511-4	-09-488-725A	-10-081-056	-10-066-500	-10-066-494	-10-066-273	-10-066-269	-10-066-211	-10-066-203	-10-066-198	-10-066-193	-10-028-072	-10-020-445A-52	-10-017-191A-52	-10-013-922	-10-002-967A-52	S-10-002-796-104	-09-999-834A-52	S-09-999-833A-52	S-09-999-832	-09-999-830A-52	-09-981-915A-52	-09-978-824-523	-09-978-8021	-09-978-697-	09-978-6651	-09-978-643A-52	-09-978-643-	9-978-6082	-09-978-608-	-09-978-585A	9-978-585-	S-09-978-299A-52	-09-978-298A-52	-09-978-295A-52	-09-978-194A-52	-09-978-193	-09-978-192A-52	
equence 4,	e 543	equence 56,	ce 104	equence 104	equence 104	equence 104	equence 104	equence 104	ice 104	1Ce 104	ice 376	ice 523	ice 523	ce 523	ice 523,	ice 104,	ice 523,	ice 523,	ce 523,	ice 523,	ce 523,	ce 523,	ice 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	ce 523,	e 523,	
Appli	Αp	lqqA	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	שי										

ALIGNMENTS

```
FILE REFERENCE: P2630R1E US/09/380,138
CURRENT APPLICATION NUMBER: US/09/380,138
CURRENT FILING DATE: 1999-08-25
PRIOR APPLICATION NUMBER: PCT/US/99/05028
PRIOR FILING DATE: 1999-03-08
PRIOR APPLICATION NUMBER: US/00/077,450
PRIOR APPLICATION NUMBER: US/00/077,632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: US/00/077,641
PRIOR APPLICATION NUMBER: US/00/077,649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
US-09-380-138-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 523, Application:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                PRIOR FILING DATE: 1
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Novel Polypeptides and Nucleic Acids Encoding the Same
                                                                                               PRIOR FILING DATE:
                                                      APPLICATION NUMBER: FILING DATE: 1
                                   APPLICATION NUMBER:
                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                      Yuan, Jean
Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard, Audrey
Gurney, Austin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09380138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wood, William I.
NUMBER:
    US 09/040,220
1998-03-17
                                                        1998-03-13
                                                                                                  1998-03-12
                                                                                                                                       1998-03-11
                                                                             _{\rm US}
                                                                                                                    SD
                                                                                                                                                                                                                                         US 60/077,632
                                                                                                                                                                                                  US 60/077,641
60/078,886
                                                                           60/078,004
                                                                                                                  60/077,791
                                                                                                                                                          60/077,649
```

PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR

998-04-15 US 998-04-21 US 998-04-21 US 998-04-22 US 998-04-22 US 998-04-23 998-04-23	DR FILING DATE: 1998-04-08 OR FILING DATE: 1998-04-09 OR FILING DATE: 1998-04-09 OR APPLICATION NUMBER: US 60/081, 203 OR FILING DATE: US 60/081, 203 OR FILING DATE: US 60/081, 229 OR FILING DATE: US 60/081, 229 OR FILING DATE: US 60/081, 838 OR APPLICATION NUMBER: US 60/081, 955 OR FILING DATE: US 60/081, 955 OR FILING DATE: US 60/081, 955 OR APPLICATION NUMBER: US 60/081, 957 OR APPLICATION NUMBER: US 60/081, 957 OR APPLICATION NUMBER: US 60/081, 957 OR APPLICATION NUMBER: US 60/081, 957	NATION NUMBER DATE: AXION NUMBER DATE: DATE: DATE: ATION NUMBER ATION NUMBER DATE:	: 1998-03-27 NUMBER: US NUMBER: US 1998-03-27 NUMBER: US 1998-03-30 NUMBER: US 1998-03-30 NUMBER: US 1998-03-30 NUMBER: US NUMBER: US NUMBER: US 1998-03-31 NUMBER: US 1998-03-31 NUMBER: US	R FILING DATE: 1998-03-20 DR FILING DATE: US 60/078,910 DR APPLICATION NUMBER: US 60/078,939 DR FILING DATE: 1998-03-20 DR FILING DATE: US 60/078,939 DR FILING DATE: 1998-03-20 DR APPLICATION NUMBER: US 60/079,294 DR APPLICATION NUMBER: US 60/079,294 DR APPLICATION NUMBER: US 60/079,556 DR APPLICATION NUMBER: US 60/079,728 DR APPLICATION NUMBER: US 60/079,786 DR FILING DATE: 1998-03-27 DR APPLICATION NUMBER: US 60/079,664
2,569 2,568 2,700 2,700 2,804 2,704	1,195 1,203 1,229 1,838 1,955 1,955	0,107 0,333 0,327 0,334 0,328 0,328 1,071 1,070	9,663 9,663 9,923 9,920 0,105 0,105 0,105	8,910 8,939 8,936 9,294 9,728 9,728
APPLICATION TO THE PRICE OF THE	PRIOR APPLICATION NUMBER: US 60/085,339 PRIOR FILING DATE: US 60/085,338 PRIOR FILING DATE: US 60/085,338 PRIOR FILING DATE: 1998-05-13 PRIOR PILING DATE: 1998-05-13 PRIOR APPLICATION NUMBER: US 60/085,323 PRIOR APPLICATION NUMBER: US 60/085,573 PRIOR APPLICATION NUMBER: US 60/085,573 PRIOR FILING DATE: 1998-05-15 PRIOR APPLICATION NUMBER: US 60/085,697 PRIOR APPLICATION NUMBER: US 60/085,580 PRIOR APPLICATION NUMBER: US 60/085,580 PRIOR APPLICATION NUMBER: US 60/085,579 PRIOR FILING DATE: 1998-05-15 PRIOR FILING DATE: US 60/085,579 PRIOR FILING DATE: US 60/085,579 PRIOR FILING DATE: US 60/085,579	PRIOR FILING DATE: 1998-05-06 PRIOR APPLICATION NUMBER: 1998-05-07 PRIOR APPLICATION NUMBER: 1998-05-07 PRIOR APPLICATION NUMBER: US 60/084,639 PRIOR FILING DATE: 1998-05-07 PRIOR APPLICATION NUMBER: US 60/084,637 PRIOR APPLICATION NUMBER: US 60/084,643 PRIOR APPLICATION NUMBER: US 60/084,643 PRIOR FILING DATE: 1998-05-07 PRIOR FILING DATE: 1998-05-07 PRIOR PRIOR APPLICATION NUMBER: US 60/084,598 PRIOR PRIOR APPLICATION NUMBER: US 60/084,600 PRIOR PRIOR PILING DATE: US 60/084,600 PRIOR PILING DATE: US 60/084,600 PRIOR FILING DATE: US 60/084,600 PRIOR FILING DATE: US 60/084,627 PRIOR FILING DATE: US 60/084,627	APPLICATION DAY FILING DAY APPLICATION APPLICATION FILING DAY APPLICATION FILING DAY APPLICATION APPLI	PRIOR APPLICATION NUMBER: US 60/082,796 PRIOR FILING DATE: 1998-04-23 PRIOR APPLICATION NUMBER: US 60/083,336 PRIOR FILING DATE: 1998-04-29 PRIOR FILING DATE: 1998-04-28 PRIOR APPLICATION NUMBER: US 60/083,322 PRIOR APPLICATION NUMBER: US 60/083,392 PRIOR FILING DATE: 1998-04-29 PRIOR FILING DATE: 1998-04-29 PRIOR PRIOR PRIOR NUMBER: US 60/083,499 PRIOR APPLICATION NUMBER: US 60/083,545 PRIOR FILING DATE: 1998-04-29

PRIOR PRIOR

PRIOR

PRIOR PRIOR

PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR PRIOR

PRIOR

PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR

PRIOR

PRIOR

PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR PRIOR

0;

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                    US-09-700-397-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-380-138-523
                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09700397
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 538
SEQ ID NO 523
                                                                                SOFTWARE:
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 344; Conservative
                                                                                                                PRIOR FILING DATE: NUMBER OF SEQ ID NOS:
                                                                                                                                             PRIOR FILING DATE: 1998-05-14
PRIOR APPLICATION NUMBER: PCT
                                                                                                                                                                                PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/700,397
CURRENT FILING DATE: 2001-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                     FILE REFERENCE:
                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 344
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                 TYPE: PRT
ORGANISM: Homo sapiens
NAME/KEY: misc_feature
                                                                LENGTH: 344
                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NRVTRVAMILNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                   LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                      LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEDEYLE1QG1TREQSGDYECSASNDVAAPVVRRVKVTVNYPPY1SEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYT©SVQTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                     LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                 Ono Pharmaceutical Co., Ltd.
                                                                                                PatentIn version 3.0
                                                                                                                                                                                                                                     Q61459
                                                                                                                                 1999-05-13
                                                                                                                                                                                                                                                   Novel Polypeptides, cDNA encoding the same, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-09-11
                                                                                                                                                 PCT/JP99/02485
                                                                                                                                                                                    JP 10-131815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 60/087,208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          us 60/086,430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1806; DB 17;
Pred. No. 1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   us 60/100,038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US 60/094,651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      us 60/087,106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     us 60/087,098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/086,392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                       use of them
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
```

```
; OTHER INFORMATION: Clone OC001 derived from human \ensuremath{\text{US-09-700-397-3}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-918-585A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 523, Applic GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                       TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic FILE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C1 CURRENT APPLICATION NUMBER: US/09/918,585A CURRENT FILING DATE: 2001-07-30
                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                 APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Ashkenazi, Avi
PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-11-03
                                 PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity nes 344; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEDEYLBIQGITREQSGDYECSASNDYAAPVVRRVKYTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                     Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                           Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                              Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                      Grimaldi,
                                                                                                                                                                                                                                                                                                                                                                                                                                      Godowski, Paul J
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen, Mary E. Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Filvaroff,
                                                                                                                                                                                                             Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ferrara, Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Baker Kevin
                                                                                                                                                                                                                                                               Roy, Margaret Ann
                                                                                                                                                                                                                                                                                    Paoni,
                                                                                                                                                                                                                                                                                                        Pan, James;
                                                                                                                                                                                                                                                                                                                        Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wei-Qiang
                                                                                                                                                                                                                                                                                                                                              Sophia S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sherman
                                                                                                                                                                                                                                                                                      Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                      J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/09918585A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1806;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             )6; DB 21;
1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
```

PRIOR APPLICATION NUMBER: 60/08358
PRIOR APPLICATION NUMBER: 60/08358
PRIOR APPLICATION NUMBER: 60/08359
PRIOR APPLICATION NUMBER: 60/08359
PRIOR FILING DATE: 1998-04-29
PRIOR PRIOR APPLICATION NUMBER: 60/083500
PRIOR PILING DATE: 1998-04-29
PRIOR FILING DATE: 1998-04-29
PRIOR PILING DATE: 1998-04-30
PRIOR APPLICATION NUMBER: 60/084366
PRIOR APPLICATION NUMBER: 60/084414
PRIOR PILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/084414
PRIOR PILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
PRIOR FILING DATE: 1998-05-06
PRIOR PILING DATE: 1998-05-06 OR APPLICATION NUMBER: 60/085339
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085338
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085323
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085582
OR FILING DATE: 1998-05-15 OR APPLICATION NUMBER: 60/084598
OR FILLING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084600
OR FILLING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084627
OR APPLICATION NUMBER: 60/084643
OR APPLICATION NUMBER: 60/084643
OR APPLICATION NUMBER: 60/084643
OR APPLICATION NUMBER: 60/084643
OR APPLICATION NUMBER: 60/084643 APPLICATION NUMBER: 60/083322 FILING DATE: 1998-04-28 APPLICATION NUMBER: 60/083392 APPLICATION NUMBER: 60/082797 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082796 APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22 APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081819
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083495
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083496 APPLICATION NUMBER: 60/083336 FILING DATE: 1998-04-27 FILING DATE: 1998-04-23 APPLICATION NUMBER: 60/082704 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082568 APPLICATION NUMBER: APPLICATION NUMBER: 60/084639 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084640 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07 FILING DATE: APPLICATION NUMBER: 60/083545 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083499 FILING DATE: 1998-04-29 FILING DATE: FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082804 APPLICATION NUMBER: 60/083554 1998-04-29 1998-04-1998-04-1998-04-1998-04-1998-04-2 60/082569 60/081838

PRIOR PRIOR

PRIOR

APPLICATION NUMBER:

60/080327

PRIOR PRIOR PRIOR PRIOR

FILING DATE: 1998-0.
APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER:

1998-04-01 1998-04-01

60/080333 60/080328

PRIOR PRIOR

FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080334
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/081070
FILING DATE: 1998-04-08
FILING DATE: 1998-04-08

PRIOR PRIOR PRIOR

FILING DATE: 1998-0. APPLICATION NUMBER:

1998-04-08

60/081203

APPLICATION NUMBER: FILING DATE:

1998-04-08 1998-04-08

60/081071

60/081195

FILING DATE: 1998-0.
APPLICATION NUMBER: APPLICATION NUMBER:

60/081049

FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/081229 FILING DATE: 1998-04-09

APPLICATION NUMBER: 60/081955 FILING DATE: 1998-04-15

60/081817

PRIOR PRIOR

PRIOR

PRIOR PRIOR

PRIOR

DR APPLICATION NUMBER: 60/080107
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080165
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080194
OR FILING DATE: 1998-03-31

PRIOR PRIOR PRIOR

PRIOR

R FILING DATE: 1998-03:
R APPLICATION NUMBER: (R APPLICATION NUMBER: R FILING DATE: 1998-03:
R FILING DATE: 1998-03:

1998-03-1998-03-

60/079786 60/079728 60/079663 60/079689

PRIOR PRIOR

PRIOR

APPLICATION NUMBER:

.998-03-30

60/079923 60/079920

PRIOR

PRIOR

FILING DATE: FILING DATE: 1998-0 APPLICATION NUMBER:

1998-03-1998-03-30

60/080105

PRIOR PRIOR

PRIOR PRIOR

APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-27

PRIOR

APPLICATION NUMBER: FILING DATE: 1998-0

1998-03-27

PRIOR

APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER:

1998-03-27

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER:
FILING DATE: 1998-0:
APPLICATION NUMBER:

FILING DATE:

FILING DATE:

1998-03-26 1998-03-25 1998-03-20

60/079656 60/079294 PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/078936 EFILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078939

PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/078004 FILING DATE: 1998-03-13 APPLICATION NUMBER: 60/078886

FILING DATE: APPLICATION NUMBER: FILING DATE: 1998-03-11 APPLICATION NUMBER: 60/077649

1998-03-

60/077791

APPLICATION NUMBER: 60/077641 FILING DATE: 1998-03-11

APPLICATION NUMBER: FILING DATE: 1998-03

1998-03-11

60/077632

APPLICATION NUMBER: 60/077450 FILING DATE: 1998-03-10

DATE: 1997-11-21

NUMBER: 60/065311 : 1997-11-13 NUMBER: 60/066364

PRIOR

FILING DATE:

1998-03-20

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                 US-09-978-188A-523
                                                                                                                                                                                                                                                                                                                    Sequence 523, Application US/09978188A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 344;
                                                                                                                                                                                                                                             APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                          APPLICANT:
                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                   APPLICANT:
                                                                      APPLICANT:
                                                                                       APPLICANT:
                                                                                                   APPLICANT
                                                                                                                  APPLICANT:
                                                                                                                               APPLICANT
                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                    APPLICANT:
             APPLICANT:
                              APPLICANT:
 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ы
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/085697
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/086023
FILING DATE: 1998-05-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/085573 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085580 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60 FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60 FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NRYTRYAWLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDYYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                          LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEDEYLEIGGITREOSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                   Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                        Ashkenazi, Avi
                            Kuo, So
Napier,
Pan, Ja
                                                                                                                                                                                       Gao,
                                                                                                                                                                                                  Fong,
            Paoni,
                                                                                                                                           Gerritsen, Mary E. Goddard, Audrey
                                                                                                                                                                        Gerber, Hanspeter
                                                                                                                                                                                                                    Filvaroff,
                                                                                                                                                                                                                                   Ferrara,
                                                                                                                                                                                                                                               Eaton, Dan
                                                                                                                                                                                                                                                            Desnoyers, Luc
                                                                                                                                                                                                                                                                           Botstein, David
                                                                                                                                                                                                                                                                                      Baker Kevin P.
Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                         Wei-Qiang
                                                       Sophia S.
                                                                                                                                                                                                      Sherman
             Nicholas F.
                                       Mary A.
                                                                                                                                                                                                                    Napoleon
f, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1806; DB 23;
Pred. No. 1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 23; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
PRIOR APPLICATION NUMBER: 60/078004
PRIOR FILING DATE: 1998-03-13
PRIOR APPLICATION NUMBER: 60/078886
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078936
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/06250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR TILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1997-11-2)
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT
                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 09/918585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: P2630P1C8
                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-03-PRIOR APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/079656
PRIOR FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                             FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/080105
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/(FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-03-APPLICATION NUMBER: 6
                                                                                                     APPLICATION NUMBER: 60/080328
                                                                                                                            FILING DATE: 1998-04-01
                                                                                                                                                APPLICATION NUMBER: 60/080327
                                                                                                                                                                       FILING DATE: 1998-03-31
                                                                                                                                                                                           APPLICATION NUMBER: 60/080194
                                                                                                                                                                                                                  FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
FILING DATE:
                                      FILING DATE: 1998-04-01
                                                             APPLICATION NUMBER:
                                                                                 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/09/978,188A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stewart, Timothy
                    NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/079728
                                                               60/080333
                                                                                                                                                                                                                                      60/080165
                                                                                                                                                                                                                                                                                                                                                                                                              60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A
```

```
PRIOR PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                 PRIOR PRIOR PRIOR
                                                                                        PRIOR
                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                OR APPLICATION NUMBER: (
OR FILING DATE: 1998-04-
OR APPLICATION NUMBER: (
OR FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081817
                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/083545
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083322
FILING DATE: 1998-04-28
APPLICATION NUMBER: 60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/081071
                                                           FILING DATE: 1998-0
                                                                                      APPLICATION NUMBER: FILING DATE: 1998-01 APPLICATION NUMBER:
                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                       FILING DATE: 1998-0. APPLICATION NUMBER:
                                                                                                                                                                                                                                                 FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/
FILING DATE: 1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/082704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                       APPLICATION NUMBER: FILING DATE: 1998-05
                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION
           APPLICATION NUMBER:
                                                   FILING DATE:
                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-08
                        NUMBER: 60/084639
1998-05-07
                                                 1998-05-07
                                                                                                                              1998-05-05
                                                                                                                                                       1998-04-30
                                                                                                                                                                                 1998-04-29
                                                                                                                                                                                                            1998-04-29
                                                                                                                                                                                                                                    1998-04-29
                                                                                                                                                                                                                                                               1998-04-29
                                                                                                                                                                                                                                                                                                                1998-04-29
                                                                                                                                                                                                                                                                                                                                            1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                             1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-08
1998-05-07
                                                                             1998-05-06
                                                                                                      1998-05-06
            60/084640
                                                                                         60/084441
                                                                                                                  60/084414
                                                                                                                                                                     60/083742
                                                                                                                                                                                              60/083500
                                                                                                                                                                                                                        60/083559
                                                                                                                                                                                                                                                  60/083558
                                                                                                                                                                                                                                                                          60/083554
                                                                                                                                                                                                                                                                                                                             60/083499
                                                                                                                                                                                                                                                                                                                                                        60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/081049
                                                               60/084637
                                                                                                                                           60/084366
```

```
뮍
                                   20
                                                                          밁
                                                                                                            Qy
                                                                                                                                                   밁
                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                            121
 301
                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085580
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-09
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085582 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/085689 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085339
                   LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                       NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                    MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                            LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                   SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                     SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                         NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                              NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                    NRVTRVAWLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                              MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                         LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1806; DB 23;
Pred. No. 1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 344;
```

US-09-978-189-523 Sequence 523, Application US/09978189 GENERAL INFORMATION: APPLICANT: Ashkenazi, Avi APPLICANT:
APPLICANT:
APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT Gerber, Hanspeter Fong, Sherman Gao, Wei-Qiang Filvaroff, Botstein, David Baker Kevin P. Ferrara, Eaton, Dan Desnoyers, Luc Napoleon Ellen

60 60

300

240

180

0; Gaps

```
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079656
PRIOR EILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/078886
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078004
PRIOR FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION : CURRENT FILING DATE:
                                                                                                                                                                                                   PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079663
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079728
                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-03-27 PRIOR APPLICATION NUMBER: 60/079689
                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/079656
PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: PRIOR APPLICATION | PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/077641
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION |
PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: P2630P1C7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 09/918585
                                                             APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30
                                                                                                                                           APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/078939 FILING DATE: 1998-03-20
                                             APPLICATION NUMBER: 60/080105
                                                                                                      FILING DATE:
                                                                                                                       APPLICATION NUMBER: 60/079920
                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/978,189 FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Paoni, Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gerritsen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sophia S.
        NUMBER: 60/080107
                                                                                                    1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Daniel
                                                                                                                                                                                    1998-03-
                          1998-03-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>ر</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and Nucleic
                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                       PRIOR
                                                                                                                                                            PRIOR
                                                                                                                                                                              PRIOR
                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/0 PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OR APPLICATION NUMBER: 60/082569
OR FILLING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/082704
OR FILLING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082804
OR FILLING DATE: 1998-04-22
OR FILLING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-23 APPLICATION NUMBER: 60/08336 FILING DATE: 1998-04-27 APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081817
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081819
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081195
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/080333 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-31
APPLICATION NUMBER: 60,
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080165
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080194
                                                                                          FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083559
                                                                                                                                                        APPLICATION NUMBER: 60/083554
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/1 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/082568 FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/081049
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/080334 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04-01
FILING DATE:
                FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083742
                                                         APPLICATION NUMBER: 60/083500
                                                                            FILING DATE: 1998-04-29
                                                                                                                                                                                               FILING DATE: 1998-04-29
                                                                                                                                                                                                                 APPLICATION NUMBER: 60/083545
                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/083495
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/082797
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/080328
                                                                                                                                   APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-15
                                                                                                                                                                                                                                        1998-04-29
                                                                                                                                                                                                                                                                                                                                                                             60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/080327
```

APPLICATION NUMBER:

60/084366

```
Qy
                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                               Ş
                          Qγ
                                                        рь
                                                                                   Qy
                                                                                                                 B
                                                                                                                                              Ş
                                                                                                                                                                             밁
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                    B
Дb
                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
301
                            301
                                                          241
                                                                                      241
                                                                                                                    181
                                                                                                                                                 181
                                                                                                                                                                             121
                                                                                                                                                                                                          121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                       61 NRYTRYAWLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                    1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                    ه...ز
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-5-07
APPLICATION NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/0 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 1998-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085338 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/084639 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084441 FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-05-15
                                                                                                                                                                            LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                        LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                   SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                      SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                        NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                    MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                        LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                              344;
                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                             100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                     60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/085323
                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                           Score 1806;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                           1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                           DB 23;
                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                         Length 344;
                                                                                                                                                                                                                                                                                                                                                             0;
```

Gaps

0

60

180

240

RESULT

```
US-09-978-191A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 523, Application US/09978191A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/978,191A CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C4
                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/078004
PRIOR FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/077641
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION UNMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                APPLICATION NUMBER: 60/078936
FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078910
FILING DATE: 1998-03-20
                                                                                        APPLICATION NUMBER: 60/079294 FILING DATE: 1998-03-25 APPLICATION NUMBER: 60/079656
                                                                                                                                                 APPLICATION NUMBER: 60/078939 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/077791 FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/066364
FILING DATE: 1997-11-21
               FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-03-11
FILING DATE:
                                                      APPLICATION NUMBER: 60/079664
                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Godowski, Paul J. Grimaldi, J. Christopher Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerber, Hanspeter
Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gurney, Austin I
Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ferrara, Napoleon Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Botstein, David
Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Napier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nicholas F
                                                                        1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ט'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H
```

```
PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                               PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                             DR APPLICATION NUMBER: 60/082568

OR FILING DATE: 1998-04-21

PR APPLICATION NUMBER: 60/082569

OR FILING DATE: 1998-04-21

OR APPLICATION NUMBER: 60/082704

OR APPLICATION NUMBER: 60/082804

OR APPLICATION NUMBER: 60/082804
                                          APPLICATION NUMBER: 60
APPLICATION NUMBER: 60
TTTING DATE: 1998-04-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 1998-03
FILING DATE: APPLICATION
                                                                                                                FILING
                                                                                                                                               APPLICATION NUMBER: 60/083336 FILING DATE: 1998-04-27
                                                                                                                                                                               APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-23
                                                                                                                                                                                                                APPLICATION NUMBER: 60/082797 FILING DATE: 1998-04-22
                                                                                                                                                                                                                                               FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082700
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/081819
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/081817 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081955
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081070 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/080334 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080328
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/080165 FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079663 FILING DATE: 1998-03-27
                                APPLICATION NUMBER: 60/083496
                                                                                                 APPLICATION NUMBER: 60/083392
                                                                                                                                 APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DATE:
                                                                                                                DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATE:
   NUMBER:
                                                                                1998-04-29
                                                                                                                1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-27
                 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/080105
                                                               60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/080194
```

```
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: PRIOR APPLICATION N PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
                                                                                     PRIOR
                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1998-04
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                 R FILING DATE: 1998-05-06
BR APPLICATION NUMBER: 60/08
BR FILING DATE: 1998-05-07
BR APPLICATION NUMBER: 60/08
BR FILING DATE: 1998-05-07
BR APPLICATION UMBER: 60/08
BR APPLICATION UMBER: 60/07
BR FILING DATE: 1998-05-07
                                      FILING DATE: 1998-05
                                                                                                                                                                                                                                                                          FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/084627
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                       APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                          APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                   APPLICATION N
                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/084600
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/084598 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                    APPLICATION
                                                                       FILING DATE:
                                                                                    APPLICATION NUMBER:
                                                                                                  FILING DATE:
                                                                                                                                                 FILING DATE:
                                                                                                                                                               APPLICATION
                                                                                                                                                                                                                APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                        FILING
                                                                                                              APPLICATION
                                                                                                                         FILING DATE: 1998-05-15
                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                   N NUMBER: 60
                                                                                                                                                                                                NUMBER: 60: 1998-05-1
                                                                                               NUMBER: 60/0: 1998-05-15
                                  NUMBER: 60/085697
                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-29
                       1998-05-15
                                                                       1998-05-15
                                                                                                                                                  1998-05-
                                                 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083545
                                                            60/085704
                                                                                     60/085573
                                                                                                                                      60/085579
                                                                                                                                                             60/085689
                                                                                                                                                                                                               60/085582
                                                                                                                                                                                                                                      60/085323
                                                                                                                                                                                                                                                               60/085338
                                                                                                                                                                                                                                                                                       60/085339
                                                                                                                                                                                                                                                                                                              60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083558
                                                                                                            60/085580
DB 23;
```

δõ 맑 δÃ 밁 δÃ. Query Match Best Local Matches Local 2 121 61 61 ---سر NRYTRYAWLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNYDYYDEGPYTCSVQTD 120 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180 Similarity Conservative 100.0%; 0; Score 1806; DB 23; Pred. No. 1.3e-163; Mismatches Indels Length 344; 0; Gaps

맑

181 121

SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT

240 180

NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV

60 60

```
D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-978-192-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 523,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P109
CURRENT APPLICATION NUMBER: US/09/978,192
CURRENT FILING DATE: 2001-10-15
CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17 PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-11-03 PRIOR APPLICATION NUMBER: 60/065311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                   PRIOR FILING DATE: 1998-03-11 PRIOR APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/066364
FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/065311 FILING DATE: 1997-11-13
                                                                          FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077791
FILING DATE: 1998-03-12
APPLICATION NUMBER: 60/078004
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/077450
                                                                                                                                                           FILING DATE: 1998-03-11 APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/078936
              APPLICATION NUMBER: 60/078886
FILING DATE: 1998-03-20
                                                         FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Godowski, Paul
Grimaldi, J. C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shelton, David L. Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/09978192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nicholas F.
                                                                                                                                                                                                                                                                 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ellen
                                                                                                                                                                                                                                            60/077632
            PRIOR APPLICATION NUMBER: 60/082704
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082804
PRIOR FILING DATE: 1998-04-22
PRIOR FILING DATE: 1998-04-22
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082700
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                               PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081838
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082568
PRIOR FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/081817
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/081229
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081955
PRIOR FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-04 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-04 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080328
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/08033
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078910
FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078939
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/080165
FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/080107
FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079920
FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079728
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/079656 FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/079294 FILING DATE: 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/079689
                                                                                                                                                           APPLICATION NUMBER: 60/082569 FILING DATE: 1998-04-21
1998-04-22
                                                                                                                                                                                                                                                                                                                          1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/079663
                                                                                                                                                                                                                                                                                                       60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/081070
```

PRIOR PRIOR PRIOR

PRIOR PRIOR

PRIOR

180

240 240 120 120 60 60

```
Best Local Similarity Matches 344; Conserv
                                Query Match
Best Local
                                                                                                               PRIOR ELLING DATE: 1998-05-1
PRIOR APPLICATION NUMBER: 60
PRIOR APPLICATION NUMBER: 60
PRIOR APPLICATION NUMBER: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OR APPLICATION NUMBER: 60/084598
OR FILLING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084600
OR FILING DATE: 1998-5-07
OR APPLICATION NUMBER: 60/084627
OR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                       R APPLICATION NUMBER: () R FILING DATE: 1998-05-) R APPLICATION NUMBER: () R FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/085338
FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/085323
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084441
FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/084637
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083495 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/082796
FILING DATE: 1998-04-23
APPLICATION NUMBER: 60/083336
FILING DATE: 1998-04-27
                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085582 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-05 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/084366 FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083742 FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083322
FILING DATE: 1998-04-28
                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-29
                                                                                APPLICATION NUMBER: 60/
FILING DATE: 1998-05-15
              100.0%; Score 1806; DB 23; ilarity 100.0%; Pred. No. 1.3e-163; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-07
                                                                                                                                                                                        1998-05-
                                                                                                                                                                                                                                                         1998-05-
                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                         1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083545
                                                                                                  60/085697
                                                                                                                                                                     60/085573
                                                                                                                                                                                                       60/085580
                                                                                                                                                                                                                                         60/085579
                                                                                                                                                                                                                                                                                                           60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/083392
                                                                                                                                                                                                                                                                         60/085689
                                                                                                                                    60/085704
                Indels
                                                Length 344;
              0;
              Gaps
                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-978-192A-523
                                                                                           FILE REFERENCE: P2630PIC9
CURRENT APPLICATION NUMBER: US/09/978,192A
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 523, Applica; GENERAL INFORMATION: APPLICANT: Ashkenazi; APPLICANT: Baker Ke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
                                           PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                    APPLICANT: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
            PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    œ
FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NRYTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                                                                                                                                                               Grimaldi, J. Chris:
Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                        Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ferrara, Napoleon
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                          Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                            Tumas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                            Paoni, Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                             Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09978192A
DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dan
                                                                                                                                                                                                                                                                                                                            Daniel
1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              סי
```

PRIOR PRIOR

PRIOR

PRIOR

PRIOR

PRIOR PRIOR

PRIOR

and

Nucleic

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR

PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR OR APPLICATION NUMBER: 60/080334
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/081070
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081049
OR APPLICATION NUMBER: 60/081071
OR APPLICATION NUMBER: 60/081071
OR APPLICATION NUMBER: 60/081071
OR FILING DATE: 1998-04-08 R APPLICATION NUMBER: (
R FILING DATE: 1998-04R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-APPLICATION NUMBER: 60/077632 FILING DATE: 1998-03-11 APPLICATION NUMBER: 60/077641 FILING DATE: 1998-03-11 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01 FILING DATE: 1998-03-APPLICATION NUMBER: 6 FILING DATE: 1998-03-FILING DATE: 1998-03-25 APPLICATION NUMBER: 60/079656 FILING DATE: 1998-03-26 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/081229 FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/081203 FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/081195 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/080333 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 APPLICATION NUMBER: FILING DATE: 1998-03 APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-30 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079728 APPLICATION NUMBER: FILING DATE: 1998-0: FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-03 APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: 1998-03 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-15 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31 APPLICATION NUMBER: APPLICATION NUMBER: 60/079663 FILING DATE: 1998-03-27 APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: 60/078939 APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: 60/077791 APPLICATION APPLICATION NUMBER: 60/080165 APPLICATION NUMBER: NUMBER: 60/081838 NUMBER: 60/081819 1998-03-20 1998-03-1998-03-12 1998-04-1998-03-1998-03-1998-03-20 1998-03-60/078004 60/081955 60/080328 60/080107 60/080105 60/079786 60/079294 60/078936 60/078886 60/081817 60/079920 60/079689 60/079664 60/077649 the transferred to the second PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR OR APPLICATION NUMBER: 60/083559
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083500
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083742
OR FILING DATE: 1998-04-39
OR APPLICATION NUMBER: 60/084366
OR APPLICATION NUMBER: 60/084366
OR APPLICATION NUMBER: 60/084366 OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083495
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083496
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083499
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29 R APPLICATION NUMBER: 60, R FILING DATE: 1998-05-13 PAPLICATION NUMBER: 60, R FILING DATE: 1998-05-15 R APPLICATION NUMBER: 60, R APPLICATION NUMBER: 60, OR APPLICATION NUMBER: (
OR FILING DATE: 1998-05:
OR APPLICATION NUMBER: (
OR FILING DATE: 1998-05 FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085689
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085579
FILING DATE: 1998-05-15 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07 FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/ APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER: APPLICATION NUMBER: 60/083554 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/ FILING DATE: 1998-05-07 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: 60/0 FILING DATE: 1998-05-06 APPLICATION NUMBER: 60/ FILING DATE: 1998-05-06

1998-05-13 1998-05-1998-05-

60/084643

60/085339

60/085582 60/085323 60/085338

60/085700

1998-05-07 1998-05-07

60/084441 60/084414

60/084637

60/084598 60/084640 60/084639

60/084600

DR FILING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/082568
DR FILING DATE: 1998-04-21
DR APPLICATION NUMBER: 60/082569
DR FILING DATE: 1998-04-21
DR APPLICATION NUMBER: 60/082704 APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-23 APPLICATION NUMBER: 60/083336 FILING DATE: 1998-04-27 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082804 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-28 APPLICATION NUMBER: 60/ APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-22 60/083322 60/082797

60/083392

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-978-193A-523 Sequence 523, Application US/09978193A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                          APPLICANT:
                                                                                                                         APPLICANT:
                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                   APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/085697 PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
             APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: p2630p1C6
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
CURRENT APPLICATION
                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                           APPLICANT:
                                                                                                                                                                                       APPLICANT
                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 100.0%;
Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               j.,,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085704
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/085580 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               iqceasavpsaefqwykddkrliegkkgvkvenrpflskliffnvsehdygnytcvasnk 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NHPKTSRYHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NRYTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              344;
                                                                           Tumas, Daniel
Williams, P. Mickey
                                                                                                     Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                  Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                            Gao, Wei-Qiang
Gerber, Hanspeter
                                                                                                                                                                                                                                                                   Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                Godowski, Paul
                                                                                                                                                                                                                                                                                             Goddard, Audrey
                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                         Fong,
                                                                                                                                                                                                                                                                                                                                                                          Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                     Botstein, David
                                                                                                                                                        Paoni, Nicholas F.
                                                                                                                                                                                                   Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                          Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                      Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baker Kevin P.
                                                                                                                                                                                       Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                        James;
                                                                                                                                                                                                                                                                                                                                                             Sherman
NUMBER: US/09/978, 193A
                                                                                                                                                                                    Mary A.
                                                                                                                                                                                                                                                                                                                                                                                          Napoleon
                                                                                                                                                                                                                                                                                                                                                                             Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1806; DB 23; Pred. No. 1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
```

PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION UNMBER: 60/077641
PRIOR FILING DATE: 1998-03-11 PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450 CURRENT FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250 PRIOR AFFECTION DATE: 1998-04-00
PRIOR APPLICATION NUMBER: 60/C PRIOR FILING DATE: 1998-03-12 PRIOR APPLICATION NUMBER: 60/ PRIOR FILING DATE: 1998-03-13 PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311 PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249 PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-03-PRIOR FILING DATE: 1997-11-PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR APPLICATION NUMBER: 60/0 PRIOR FILING DATE: 1998-03-20 PRIOR FILING DATE: 1998-03
PRIOR APPLICATION NUMBER: PRIOR APPLICATION NUMBER: 60/077791 PRIOR FILING DATE: 1998-03-PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081195 PRIOR APPLICATION NUMBER: 60/081049 PRIOR APPLICATION NUMBER: 60/081070 PRIOR FILING DATE: 1998-04-08 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080334 PRIOR APPLICATION NUMBER: 60/080333 PRIOR FILING DATE: 1998-04-01 PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR FILING DATE: 1998-03-20 PRIOR APPLICATION NUMBER: 60/078886 DR APPLICATION NUMBER: 60/079294
OR FILING DATE: 1998-03-25
OR APPLICATION NUMBER: 60/079656
OR FILING DATE: 1998-03-26
OR APPLICATION NUMBER: 60/079664
OR APPLICATION NUMBER: 60/079664
OR FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/080327 APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/079920 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-20 FILING DATE: FILING DATE: APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-27 APPLICATION NUMBER: APPLICATION NUMBER: 60/080328 FILING DATE: 1998-03-20 1998-04-08 1998-04-01 1998-04-01 1998-03-31 1998-03-31 1998-03-30 1998-03-27 60/080194 60/080165 60/080105 60/079728 60/079663 60/078939 60/078910 60/078936 60/078004 60/077649 60/081071

```
PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                  PRIOR
                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083742 FILING DATE: 1998-04-30 APPLICATION NUMBER: 60/084366 FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-04-27
APPLICATION NUMBER: 60/083322
FILING DATE: 1998-04-28
APPLICATION NUMBER: 60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-23 APPLICATION NUMBER: 60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/
                                          APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07
                                                                                                                                 APPLICATION NUMBER: 60/084640 FILING DATE: 1998-05-07
                                                                                                                                                              APPLICATION NUMBER: 60/084639 FILING DATE: 1998-05-07
                                                                                                                                                                                           APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07
                                                                                                                                                                                                                         APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/084414 FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083495
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/082797 FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/082804
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                            APPLICATION NUMBER: 60/084643
                                                                                                                  APPLICATION NUMBER: 60/084598
                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                        FILING DATE: 1998-05-07
                                                                                    APPLICATION NUMBER: 60/084600
                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-15
               1998-05-07
                                                                                                    1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-09
                                                                                                                                                                                                                                       60/084441
                                                                                                                                                                                                                                                                                                                                                                                        60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/081955
60/085339
```

```
밁
                                                                                                                           20
                                                                                                                                                                      В
                                                                                                                                                                                                               γQ
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/08538
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085582
PRIOR APPLICATION NUMBER: 60/085700
PRIOR APPLICATION NUMBER: 60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/085573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
                           301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVHHLLLKF 344
                                                                                                        241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                 121
301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                  241 LQCEAS: VPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                      121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085689
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/08579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085580
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/085697
                                                                                                                                                                                                                                                        NRVTRVAWLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                               NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                          MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 1806; DB 23; 100.0%; Pred. No. 1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
```

0;

US-09-978-194A-523 GENERAL INFORMATION: Sequence 523, Application US/09978194A APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: Ashkenazi, Avi APPLICANT APPLICANT APPLICANT: APPLICANT: APPLICANT APPLICANT: APPLICANT: APPLICANT APPLICANT: Eaton, Dan Ferrara, Na Filvaroff, Goddard, Audrey Godowski, Paul J. Grimaldi, J. Christopher Gao, Gurney, Austin L. Hillan, Kenneth J Gerber, Hanspeter Fong, Sherman Baker Kevin P. Botstein, David Kuo, Sophia S. Kljavin, Ivar J. Gerritsen, Mary E. Desnoyers, Luc Wei-Qiang Napoleon f, Ellen

```
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/04249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/06364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: APPLICANT:
                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-03-0
PRIOR APPLICATION NUMBER: 60
PRIOR FILING DATE: 1998-03-0
                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR EPILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/978,194A CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Williams, P. Mickey
APPLICANT: Woold, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1998-0: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION N
PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE:
                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                              OR APPLICATION NUMBER: (
OR FILING DATE: 1998-03-
OR APPLICATION NUMBER: (
OR FILING DATE: 1998-03-
                            APPLICATION NUMBER: 60/080194
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080327
FILING DATE: 1998-04-01
                                                                                                            FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/
FILING DATE: 1998-03-31
                                                                                                                                                                                                               APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-03-26
APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078936
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/077791
                                                                                                                                                                          APPLICATION NUMBER: 60/080107
                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P2630P1C10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Margaret Ann
Con, David L.
        NUMBER: 60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 мольек: 60/079294
1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                         1998-03-27
                                                                                                                                                                                                1998-03-31
                                                                                                                                                                                                                                                                                1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mary
                                                                                                                                                                                                                                                                                                                       1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-11
                                                                                                                               60/080165
                                                                                                                                                                                                                                                                                                                                             60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/078886
                                                                                                                                                                                                                                                                                                                                                                                    60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                             60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/077649
                                                                                                                                                                                                                                                                                                    60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-04-15
PRIOR PRIOR PRIOR NUMBER: 60/0
PRIOR APPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION UNMBER: 60/084637
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                  PRIOR FILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-06
                                                                                                                                              PRIOR APPLICATION NUMBER: 60/084366
                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/083742
PRIOR FILING DATE: 1998-04-30
                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/083559
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083500
                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/083495
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-04-23
PRIOR APPLICATION NUMBER: 60/083336
PRIOR FILING DATE: 1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-04-22 PRIOR APPLICATION NUMBER: 60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/082704 PRIOR FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/082568 PRIOR FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-04 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                             1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-15
                                                                                                                                                                                                                                                                                                 1998-04-29
                                                                                                                                                                                                                                                                                                                                        1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-08
                                                                                                                                                                                                                                                                                                                                                                               1998-04-29
                                                                                                                                                                                                                                                                                                                     60/083558
                                                                                                         60/084414
```

PRIOR APPLICATION NUMBER: 60/081203 PRIOR APPLICATION NUMBER: 60/081049 PRIOR APPLICATION NUMBER: 60/081070 PRIOR APPLICATION NUMBER: 60/081071 APPLICATION NUMBER: 60/080333 1998-04-08 1998-04-01 60/081229 60/080334 60/081955 60/081195

60/081817

60/081819

APPLICATION NUMBER: 60/082569 60/081952 60/081838

1998-04-29 1998-04-22 1998-04-29 1998-04-28 60/083545 60/083392 60/082796

```
US-09-978-295A-523
                                                                                                                                RESULT
                                                                             Sequence 523, Application US/09978295A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                              APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
APPLICANT: Botstein, Dav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
   APPLICANT:
                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                             301
                                                                                                                                                                                                            301
                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                           121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ۳,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/085573 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/085700
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085689
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085580 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085323
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085338 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/084643 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                             LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                          SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                             LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                            LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                            LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                          SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                          NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                         NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 100.
44; Conservative
                                Baker Kevin P.
Botstein, David
 Eaton, Dan
                Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1806; DB 23;
Pred. No. 1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                           PRIOR PRIOR
                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                        PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078004
PRIOR FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: P2630P1C11
CURRENT APPLICATION NUMBER: US/09/978, 295A
CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT
                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 1998-0
          APPLICATION NUMBER: 60/079786
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079920
                                                         APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                           APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                        APPLICATION NUMBER: 60/
                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
FILING DATE:
                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Williams, P. Mic
Wood, William I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goddard, Audrey
Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ferrara, Napoleon
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Margaret Ann
                                                Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nicholas
                                                                                           1998-03-
                                                                                                                           1998-03-
                                                                                                                                                                                         1998-03-26
                                                                                                                                                                                                                           1998-03-
                                                                                                                                                                                                                                                         1998-03-20
                                                                                                                                                                                                                                                                                       1998-03-
                                                                                                                                                                                                                                                                                                                         1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mickey
                                                                                                                                                                                                          60/079656
                                                                                                                                                                                                                                        60/079294
                                                                                                                                                                                                                                                                          60/078939
                                                                                                                                                                                                                                                                                                                                       60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/077632
                                                                                                          60/079663
                                                                                                                                                                        60/079664
                                                                                                                                          60/079689
                                                                                                                                                                                                                                                                                                       60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ħ
```

B δÃ Ъ Qy

20

Qy Вþ ΩV 밁 Qy

DЬ

PRIOR PRIOR PRIOR PRIOR PRIOR

OR APPLICATION NUMBER: 60/079923
OR FILING DATE: 1998-03-30
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080105
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080107
OR APPLICATION NUMBER: 60/080194
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080327
OR APPLICATION NUMBER: 60/080327
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080328
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/08033
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/08033
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081070
OR APPLICATION NUMBER: 60/081071
OR APPLICATION NUMBER: 60/081070
OR APPLICATION NUMBER: 60/081070
OR APPLICATION NUMBER: 60/081071
OR APPLICATION NUMBER: 60/08109
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081195
OR APPLICATION NUMBER: 60/08129
OR APPLICATION NUMBER: 60/08129
OR APPLICATION NUMBER: 60/08129
OR FILING DATE: 1998-04-09
OR FILING DATE: 1998-04-09
OR FILING DATE: 1998-04-09
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/08129
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081817

```
밁
                                                                               80
                                                                                                                            몂
                                                                                                                                                                   80
                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/084637
PRIOR FILLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084639
PRIOR APPLICATION NUMBER: 60/084640
PRIOR FILLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084598
PRIOR APPLICATION NUMBER: 60/084640
PRIOR FILLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084627
PRIOR FILLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085339
PRIOR APPLICATION NUMBER: 60/085339
PRIOR APPLICATION NUMBER: 60/085339
PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILLING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085333
PRIOR APPLICATION NUMBER: 60/085333
PRIOR FILLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08582
PRIOR APPLICATION NUMBER: 60/08589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/084414
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/085697 PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING PRIOR APPLICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-04-30 PRIOR APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083742
    301
                                          241
                                                                                 241
                                                                                                                          181
                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                     121
                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                               ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/083500
                                                                                                                      NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                              MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                    NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIBIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                                                                                             MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1806; DB 23;
Pred. No. 1.3e-163;
344
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                        300
                                                                                 300
                                                                                                                          240
                                                                                                                                                                 240
                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                    60
```

0;

PRIOR

OR APPLICATION NUMBER: 60, OR FILING DATE: 1998-04-1: OR APPLICATION NUMBER: 60, OR FILING DATE: 1998-04-1:

60/081838)4-15

60/081952

PRIOR PRIOR

R FILING DATE:
R APPLICATION N
R FILING DATE:

998-04-29

60/083558 60/083554 60/083545

APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-29

NUMBER: 60/0: 1998-04-29 NUMBER:

APPLICATION NUMBER: 60/ FILING DATE: 1998-04-29

NUMBER: 60/083499

OR APPLICATION NUMBER: 60/082700
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082797
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082796
OR FILING DATE: 1998-04-23
OR APPLICATION NUMBER: 60/083336
OR FILING DATE: 1998-04-27
OR APPLICATION NUMBER: 60/083322
OR APPLICATION NUMBER: 60/083322
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083495
OR APPLICATION NUMBER: 60/083496

OR APPLICATION NUMBER: 60/082568
OR FILING DATE: 1998-04-21
OR FILING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/082704
OR APPLICATION NUMBER: 60/082704
OR APPLICATION NUMBER: 60/082804
OR APPLICATION NUMBER: 60/082804
OR FILING DATE: 1998-04-22
OR FILING DATE: 1998-04-22

```
RESULT 12
US-09-978-298A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Ashkenaz
APPLICANT: Baker K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REPERENCE: P2630P1C2
                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-07-30 PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/978,298A CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/918585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/066364
FILING DATE: 1997-11-21
APPLICATION NUMBER: 60/077450
FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/064249 FILING DATE: 1997-11-03
                                                                                                                                                                                                  APPLICATION NUMBER: 60/078004 FILING DATE: 1998-03-13
                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/077791 FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/
FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/077641 FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/065311
FILING DATE: 1997-11-13
                         APPLICATION NUMBER: 60/079294 FILING DATE: 1998-03-25
                                                          APPLICATION NUMBER: 60/078939
FILING DATE: 1998-03-20
                                                                                             FILING DATE: 1998-03-20
                                                                                                            FILING DATE: 1998-03
APPLICATION NUMBER:
                                                                                                                                                                 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                 APPLICATION NUMBER: 60/078936
                                                                                                                                                                                APPLICATION NUMBER: 60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ashkenazi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09978298A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nicholas F.
                                                                                                                              1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ellen
       60/079656
                                                                                                              60/078910
                                                                                                                                                                                                                                                                                           60/077649
                                                                                                                                                                                                                                                                                                                                                               60/077632
                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/082569
FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081819
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
FILING DATE: 1998-0
FILING DATE: 1998-04-28
APPLICATION NUMBER: 60/083392
FILING DATE: 1998-04-29
                                                                     APPLICATION NUMBER: 60/
FILING DATE: 1998-04-27
                                                                                                        APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-23
                                                                                                                                        APPLICATION NUMBER: 60/082797
FILING DATE: 1998-04-22
                                                                                                                                                                                           APPLICATION NUMBER: 60/082804 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/
FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/081070 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/080334 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60 FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/079663 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/079664
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079689
FILING DATE: 1998-03-27
                                                                                                                                                                           FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/080105
FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/079920
                                                   APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-08
                                                                                      60/083336
                                                                                                                                                                                             60/082700
                                                                                                                                                                                                                                                                                                                                       60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/080194
```

```
D
 Вþ
                            Ωy
                                                                                      QY
                                                                                                                       Matches
                                                                                                                                  Query Match
Best Local S
                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION UNMBER: 60/085339
PRIOR FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/084598 PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/084640 PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
 61
                             61
                                                                                                                                                                             R FILING DATE: :
R APPLICATION NI
R FILING DATE: :
                                                                                         \vdash
                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/085582 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/085338 FILING DATE: 1998-05-13 APPLICATION NUMBER: 60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/084441 FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/083554 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083495
FILING DATE: 1998-04-29
                    NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                         MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                        MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                   Similarity
                                                                                                                     Conservative
                                                                                                                                                                                             NUMBER: 60/085697
                                                                                                                                                                                                                                      NUMBER: 60/085573
1998-05-15
                                                                                                                                                                               1998-05-15
                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                       1998-05-15
                                                                                                                                                                                                                                                                                                                                 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-
                                                                                                                                                                                                                                                                                                                                                             1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-29
                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                     60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083496
                                                                                                                                                                                                                         60/085704
                                                                                                                                                                                                                                                                                                                                             60/085689
                                                                                                                                                                                                                                                                                                                                                                           60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083499
                                                                                                                   0;
                                                                                                                   Score 1806; DB 23;
Pred. No. 1.3e-163;
; Mismatches 0;
                                                                                                                   Indels
                                                                                                                                                 Length
                                                                                                                  0;
```

Gaps

0

60 60

```
δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-978-299A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 523,
                                                                                                                                                                                                                                           TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE OF INVENTION: Acids Encoding the Same CURRENT P2630PLC3 (US/09/978,299A)

CURRENT APPLICATION NUMBER: US/09/978,299A

CURRENT FILING DATE: 2001-10-15

PRIOR APPLICATION NUMBER: 09/918585

PRIOR FILING DATE: 2001-07-30

PRIOR APPLICATION NUMBER: 60/062250

PRIOR APPLICATION NUMBER: 60/064249

PRIOR FILING DATE: 1997-11-03
                                                                                       PRIOR AFFLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077632
---- pri.ing date: 1998-03-11
                                                                                                                                     PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                 PRIOR APPLICATION NUMBER: 60/077649 PRIOR FILING DATE: 1998-03-11
                                                                    PRIOR FILING DATE: 1998-03-11
                                                                                   PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LGHTNASIMLEGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKYTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                           Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Grimaldi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kljavin, Ivar J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ferrara, Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eaton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/09978299A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dan
1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ש
              60/077791
                                                                                     60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
```

PRIOR R FILING DATE: 178 APPLICATION NUMBER: 1988-04 R FILING DATE: 198-04
PR APPLICATION NUMBER: 1998-04
PRILING DATE: 1998-04 FILING DATE: 1998-04-21 APPLICATION NUMBER: 60/082569 FILING DATE: 1998-04-21 APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: 1998-04 APPLICATION NUMBER: FILING DATE: 1998-04 FILING DATE: 1998-04 APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: APPLICATION NUMBER: APPLICATION NUMBER: 60/080333 FILING DATE: FILING DATE: 1998-04 APPLICATION NUMBER: APPLICATION NUMBER: 60/080327 APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080105 FILING DATE: APPLICATION NUMBER: 60/079786 APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079663 FILING DATE: FILING FILING DATE: FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078936 APPLICATION FILING DATE: APPLICATION NUMBER: FILING APPLICATION NUMBER: 60/081952 FILING DATE: APPLICATION NUMBER: 60/081071 APPLICATION NUMBER: FILING DATE: FILING DATE: APPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080165 FILING DATE: FILING DATE: APPLICATION NUMBER: 60/079923 FILING APPLICATION NUMBER: FILING DATE: FILING APPLICATION NUMBER: 60/079689 APPLICATION NUMBER: 60/079664 APPLICATION NUMBER: 60/079656 APPLICATION NUMBER: 60/079294 FILING DATE: APPLICATION NUMBER: FILING FILING APPLICATION DATE: DATE: DATE: DATE: DATE: DATE: NUMBER: 60/082804 NUMBER: 60/082704: 1998-04-22 NUMBER: 1998-04-15 1998-04-1998-04-1998-04-1998-04-09 1998-04-09 1998-04-08 1998-04-08 1998-04-08 1998-04-01 1998-04-01 1998-04-01 1998-03-31 1998-03-3 1998-03-30 1998-03-30 1998-03-27 1998-03-1998-03-1998-03-26 1998-03-1998-04-1998-04-08 1998-04-03 1998-03-27 1998-03-20 1998-03-20 998-03-25 60/078004 60/082568 60/081838 60/081819 60/081817 60/081955 60/081229 60/081195 60/081049 60/081070 60/080334 60/080328 60/079920 60/078939 60/078886 60/081203

PRIOR FILING DATE: 1998-05-15
PRIOR FPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/
PRIOR RILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-15 PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083742 PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083554
PRIOR FILING DATE: 1998-04-29 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-04 PRIOR APPLICATION NUMBER: PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR FILING DATE: 1998-0 PRIOR PRIOR APPLICATION NUMBER: 60/084414
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION UNMBER: 60/084441
PRIOR FILING DATE: 1998-05-06 PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-PRIOR PRIOR PRIOR PRIOR PRIOR FILING DATE: 1998-0 PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR OR APPLICATION NUMBER: 60/085339
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/08538
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085323
OR FILING DATE: 1998-05-13
OR FILING DATE: 1998-05-15
OR FILING DATE: 1998-05-15
OR FILING DATE: 1998-05-15 FILING DATE: 1998-04
APPLICATION NUMBER: FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15 FILING DATE: FILING DATE: 1998-04-28 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-27 APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085689 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084643 FILING DATE: 1998-05-07 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084598 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084366 FILING DATE: 1998-05-05 FILING DATE: APPLICATION NUMBER: APPLICATION NUMBER: 60/1 FILING DATE: 1998-04-29 APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: FILING DATE: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: 1998-04-1998-05-07 1998-05-07 1998-04-1998-04-1998-04-29 1998-04-22 1998-05-07 1998-04-.998-04-23 60/084637 60/083499 60/083496 60/083495 60/083322 60/083336 60/082797 60/082700 60/084600 60/083500 60/083559 60/083545 60/082796 60/085573 60/085580 60/085579 60/084627 60/084640 60/083558 60/083392

```
; NUMBER OF SEQ ID NOS: 624

Prior Application removed -

; SEQ ID NO 523

; SEQ ID NO 523

; LENGTH: 344

; TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
; ORGANISM: Homo sapiens US-09-978-585-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-978-585-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 523, Application US/09978585 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                       TITLE OF INVENTION: Secreted and Transmembrane Polypeptides TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                               APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
                                                                                                               CURRENT FILING DATE:
                                                                                                                            CURRENT APPLICATION NUMBER: US/09/978,585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MKTIQPKMHNSISWAIFTGLAALCLEQGVPVRSGDATEPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGGKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDDYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NRYTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Baker Kevin P.
Botstein, David
Desnoyers, Luc
                                                                                                                                                                                              Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                          Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                               Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ferrara, Napoleon
Filvaroff, Ellen
                                                                                                                                                                                                                                 Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                              Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                 Paoni,
                                                                                                                                                                                                                                                                                                                                 Napier,
                                                                                                                                                                                                                                                                                                                                                                                            Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                               Sophia S.
                                                                                                                                                                                                                                                                                                                 James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sherman
                                                                                                                                                                                                                                                                                                Nicholas F
                                                                                                                                                                                                                                                                                                                             Mary A.
                                                                                                               2001-10-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 1806; DB 23; Length 344; 100.0%; Pred. No. 1.3e-163;
                                                                          - See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                              Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                             and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                             Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-978-585A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
Prior Application removed - See File Wrapper or Palm SEQ ID NO 523
LENGTH: 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 523, Application US/09978585A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                               CURRENT APPLICATION NUMBER: US/09/978,585A
CURRENT FILING DATE: 2001-10-16
NUMBER OF SEQ ID NOS: 624
                                                                                                APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: p2630plC15
                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                               APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ashkenazi, Avi
                                                                                                                                               Tumas, Daniel
Williams, P. Mickey
Wood, William I.
                                                                                                                                                                                          Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong,
                                                                                                                                                                                                                                                                                                                         Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen, Mary E. Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                       Gerber, Hanspeter
                                                                                                                                                                                                                            Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                           Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ferrara, Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eaton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baker Kevin
                                                                                                                                                                                                                                             Paoni,
                                                                                                                                                                                                                                                              Pan, James;
                                                                                                                                                                                                                                                                          Napier, Mary A.
                                                                                                                                                                                                                                                                                            Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sherman
                                                                                                                                                                                                                                             Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     יסי
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1806; DB 23; Pred. No. 1.3e-163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
```

ORGANISM: Homo sapiens

TYPE: PRT

US-09-978-585A-523

```
Qy
                                                                                           д
                                                                                                                                       Db
                                                                                                                                                                                      DЬ
                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                   Дb
  밁
                     δÃ
                                              DЪ
                                                                                                             QУ
                                                                                                                                                            Qy
                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 1806; DB 23; Length 344; Best Local Similarity 100.0%; Pred. No. 1.3e-163; Matches 344; Conservative 0; Mismatches 0; Indels 0; Gaps
241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                        181 SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKYTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                     121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                   61 NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIBIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                 0;
```

Search completed: July 12, 2002, 00:41:09 Job time: 912 sec

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score
     seq
seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                length: 0
length: 2000000000
     100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pending_Patents_AA_New:*

1: /cgn2_6/ptodata/2/paa/PCT_NEW_COMB.pep:*

2: /cgn2_6/ptodata/2/paa/US05_NEW_COMB.pep:*

3: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep:*

4: /cgn2_6/ptodata/2/paa/US07_NEW_COMB.pep:*

5: /cgn2_6/ptodata/2/paa/US09_NEW_COMB.pep:*

6: /cgn2_6/ptodata/2/paa/US00_NEW_COMB.pep:*

6: /cgn2_6/ptodata/2/paa/US00_NEW_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       July 12, 2002, 00:33:02; Search time 73.58 Seconds (without alignments) 485.542 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MKTIQPKMHNSISWAIFTGL......RRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-700-397-3
1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  323636 seqs, 103855142 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
     DВ
                                        попопопопопопопопопо
 US-09-978-403A-523

US-09-978-584A-523

US-09-978-564A-523

US-09-978-757A-523

US-09-978-757A-523

US-09-998-831A-523

US-09-998-423A-523

US-09-998-423A-523

US-10-013-912A-523

US-10-013-912A-523

US-10-013-912A-523

US-10-017-082A-523

US-10-1119-480-126

US-10-121-043-376

US-10-121-043-376

US-10-121-043-376

US-10-121-043-376

US-10-121-054-376

US-10-121-056-376

US-10-121-056-376

US-10-121-058-376

US-10-121-058-376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   323636
   sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Description
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                    $\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tincet{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texicr{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tert{\text{\text{\text{\text{\text{\text{\text{\text{\tin\text{\te\tint{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\texi\text{\text{\text{\text{\text{\texi}\tint{\text{\tin}\tint{\tex{\texict{\text{\tin}\tint{\tintet{\text{\texicr{\texictex{\tinte\
RESULT
US-09-9
```

45	44	43	42	41	40	39	38	37	36	ω G	34	33	32	31	30	29	28	27
1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806	1806
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344
o,	σ'n	σ	σ	6	0	σ	δ	6	σ	σ	σ	6	6	6	6	6	6	6
US-10-124-822-376	US-10-121-059-376	US-10-121-055-376	US-10-121-042-376	US-10-121-061-376	US-10-121-052-376	US-10-121-048-376	US-10-121-040-376	US-10-121-051-376	US-10-121-046-376	US-10-121-045-376	US-10-121-041-376	US-10-123-109-376	US-10-123-213-376	US-10-123-212-376	US-10-123-157-376	US-10-123-156-376	US-10-123-154-376	US-10-123-108-376
Sequence 376, A	`	`	`	•	Sequence 376, A	•	`	•	•	•	•	-	•	•	-	•	Sequence 376, A	Sequence 376, A
dđ	₫₫ſ	đđ	dd	dd	App	ďď	ďď	dď	dđ	dđ	ďď	đď	ďď	ďď	ďď	đđ	ďď	qq

ALIGNMENTS

S-09-978-403A-523	
Sequence 523, Applic	Application US/09978403A
APPLICANT: Ashk	Ashkenazi, Avi
••	Baker Kevin P.
• ••	-
APPLICANT: Eat	Eaton, Dan
•	Ferrara, Napoleon
••	Filvaroff, Ellen
	Fong, Sherman
• ••	Gao, Wei-Qiang
APPLICANT: GET	Gerritsen, Mary E.
	udrey
••	Godowski, Paul J.
••	Grimaldi, J. Christopher
••	D
	Hillan, Kenneth J
APPLICANT: Kuc	Kuo, Sophia S.
••	Napier, Mary A.
APPLICANT: Pan,	, James;
••	Paoni, Nicholas F.
APPLICANT: ROY	коу, margaret Ann Shelton, David L.
	Stewart, Timothy A.
••	Tumas, Daniel
	Williams, P. Mickey
N N	discount to leave the land
TITLE OF INVENTION:	INVENTION: Secreted and Transmembrane Polypeptides and Nucleic INVENTION: Acids Encoding the Same
	micouring circ
CURRENT APPLICA	APPLICATION NUMBER: US/09/978,403A
	2002-0
PRIOR APPLICATI	À
	TE: 2001-07-30
PRIOR FILING DATE:	FILING DATE: 1997-10-17
	1997-17
	7
	1997-1
PRIOR APPLICATION	APPLICATION NUMBER: 60/077450
	DATE: 1998-03-10
APPLIC.	-

																													•												-	******	-									
	 .		••		•				•• •		٠.	٠			٠.	٠	、				•• •		٠.	٠			٠. ٠					 .		.			٠. ٠		٠.					· -•			•••			•••	•• ••	
PRIOR	S	нн	H	55	RIC	55	PRIOR	i	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	DE LOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	4 24	1-4	PRIOR	2	27	PRIOR		PRIOR	i H	H	ROT RG	ı i–i	27 2	PRIOR	RI	PRIOR	ŘIO
LING DA	PPLICATION	APPLICATION FILING DATE:	LING DAT	APPLICATION	PPLICATION	<u> </u>	ILING DAT	PLICATION	FILING DATE:	LING DAT	PPLICATION	LING DATE	ADDITION DATE:	PPLICATION	ILING DA	LICATION	LING	LING	LICATION	FILING DATE:	APPLICATION	PATE NO.		ATION	FILING DATE:	LING	ICATION		LING	PLIC!	PLICATION	LING DATE	PLICAT	PLICATION	FLICATION LING DATE	TLING DA	PPLICATION	ILING D	TLING DA	PPLICATION	PPLICATION	ING DATE	TEING DATE	PPLICATION	ILING DAT	TLING DATE	PPLICATION	TLING DATE	Z if	PPLICATION	LING DATE	TLING DATE
1998-05-15	NUMBER: 60	NUMBER: 60/085689	1998-05-15	1998:05-1	NUMBER: 60	: 1998-05-13	1998-05-13	NUMBER: 60	1998 2010	1998-05-07	NUMBER: 60	05-07	0-50-866T	NUMBER: 60	1998-05-07	NUMBER: 60	1998-05-	MARE: 60 706161	NUMBER: 6	1998-05-07	NUMBER: 60	1998-05-	1998-05-06	NUMBER: 60	1998	: 1998-04-30	NUMBER: 60	NUMBE	1998-04-29	NUMBER: 60	NUMBER: 60	8-04-29	1998-04-2 NUMBER: 60	NUMBER: 60	04-	1998-04-29	NUMBER: 60	1998-04-	1998-04-29	ER: 60	NUMBER: 60	04-27	8-04-23 8-04-23	NUMBER: 60	1998-04-22	8-04-22 FD: 60/0937	NUMBER: 60	04-22	8-04-22 FB: 60/093	NUMBER: 60		98-04-21

PRIOR PRIOR

APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27 FILING DATE: 1998-03-27

PRIOR

PRIOR

PRIOR

APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079663

PRIOR APPLICATION NUMBER: 60/079923 PRIOR FILING DATE: 1998-03-30 PRIOR APPLICATION NUMBER: 60/080105

PRIOR PRIOR

PRIOR

APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079920 FILING DATE: 1998-03-30

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/079656 FILING DATE: 1998-03-26 APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-27

APPLICATION NUMBER: 60/079294 FILING DATE: 1998-03-25

PRIOR

FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078910
FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078939
FILING DATE: 1998-03-20

PRIOR

PRIOR

PRIOR APPLICATION NUMBER: 60/078886

FILING DATE: 1998-03-13

APPLICATION NUMBER: 60/078004 APPLICATION NUMBER: 60/077791 FILING DATE: 1998-03-11

FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078936

PRIOR FILING DATE: 1998-03-12

FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077641
FILING DATE: 1998-03-11

APPLICATION NUMBER: 60/077649

PRIOR PRIOR PRIOR PRIOR

OR APPLICATION NUMBER: 60/081955
OR FILLING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081817
OR FILLING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081819
OR FILLING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081952
OR FILLING DATE: 1998-04-15
OR FILLING DATE: 1998-04-15

APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/081229 FILING DATE: 1998-04-09

NUMBER: 60/081955 1998-04-15

OR APPLICATION NUMBER: 60/081071
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081195
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081203
OR FILING DATE: 1998-04-09

PRIOR PRIOR

PRIOR PRIOR

APPLICATION NUMBER: 60/080328
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01

APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080165 APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 FILING DATE: 1998-03-31

PRIOR

APPLICATION NUMBER: 60/081049 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081070 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/080334 FILING DATE: 1998-04-01

```
QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-978-544A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 523, Applic GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Best I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin p
APPLICANT: Botstein, Dav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
                          APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C13
CURRENT APPLICATION NUMBER: US/09/978,544A CURRENT FILING DATE: 2002-03-19
                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                     APPLICANT:
                                                                                                                                   APPLICANT
                                                                                                                                                 APPLICANT:
                                                                                                                                                                 APPLICANT:
                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                               APPLICANT
                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                           APPLICANT
                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                       APPLICANT
                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local . 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                             Roy, Marga
                                                                                                                                                                          Napier,
Pan, Jam
                                                                                                                                                                                                                                                                                                                                               Gao,
                                                                                                                                                                                                                                                                                                                                                         Fong,
                                                                                                               Stewart, Timothy A.
                                                                                                                                                                                                                        Hillan, Kenneth
Kljavin, Ivar J.
                                                                                                                                                                                                                                                 Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker Kevin P.
Botstein, David
                                                                                                                                                               Paoni, Nicholas F
                                                                                                                                                                                                                                                                                                 Goddard, Audrey
                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                           Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                         Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                        Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                       Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09978544A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                               James;
                                                                                                                                              Margaret Ann
                                                                                                                                                                                                             Sophia S.
                                                                                                                                                                                                                                                                                                                                           Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                             Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-15
                                                                                                                                                                                          Mary A.
                                                                                                                                                                                                                                                                                                                               Hanspeter
                                                                                                                                David L.
                                                                                                                                                                                                                                                                                                                                                                                         Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                         Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ۵.
                                                                                                                                                                                                                                       ч
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1806; DB 5;
Pred. No. 2.2e-113;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                      and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                      Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                    PRIOR FILING DATE: 1998-0-
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0-
                                                                                                            PRIOR APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
```

FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079689

FILING DATE: 1998-0 APPLICATION NUMBER:

1998-03-26 1998-03-25

60/079664

APPLICATION NUMBER: 60/079656

FILING DATE:

FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/079294 APPLICATION NUMBER: 60/078939

FILING DATE: APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: FILING DATE:

1998-03-20

60/078910 60/078936

1998-03-20

APPLICATION NUMBER: 60/078886

1998-03-20

1998-03-13

60/078004

APPLICATION NUMBER: 60/077791

1998-03-12

FILING DATE:

APPLICATION NUMBER: 60/077649

1998-03-

60/077641

1998-03-1

APPLICATION NUMBER: FILING DATE: 1998-03

APPLICATION NUMBER: 60/077632 FILING DATE: 1998-03-11

FILING DATE:

1998-03-10

APPLICATION NUMBER: 60/077450

FILING DATE:

FILING DATE: FILING DATE: 1997-11 APPLICATION NUMBER:

1997-11-1997-11-03

60/065311

APPLICATION NUMBER: 60/064249

FILING DATE:

APPLICATION NUMBER: 60/062250

2001-07-30

1997-10-17

APPLICATION NUMBER: 60/066364

FILING DATE: FILING DATE: 1998-0 APPLICATION NUMBER:

APPLICATION NUMBER: 60/079663

60/079728

FILING DATE:

APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08

APPLICATION NUMBER: 60/081049

1998-04-08

1998-04-08

60/081195 60/081071 FILING DATE:

1998-04-01 1998-04-01

APPLICATION NUMBER: 60/080334

FILING DATE:

APPLICATION NUMBER: 60/080333

FILING DATE:

FILING DATE:

1998-03-31

FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080165 APPLICATION NUMBER: 60/080107 FILING DATE: FILING DATE: 1998-0: APPLICATION NUMBER:

1998-03-33

60/080105

APPLICATION NUMBER: 60/079923 APPLICATION NUMBER: 60/079920 FILING DATE: 1998-03-30

1998-03-30

FILING DATE: APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: 1998-0: FILING DATE:

1998-03-1998-03-27 1998-03-27 1998-03-27

60/079786

APPLICATION NUMBER: 60/080328 APPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01

1998-04-01

```
FILING DATE: 1998-05-07
APPLICATION NOTICE:
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/083545 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/C
FILING DATE: 1998-04-28
APPLICATION NUMBER: 60/C
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/082804 FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/082569
FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/082568 FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-15
                                                                          APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07
                                                                                                                                                                                       APPLICATION NUMBER: 60/084640 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/084414 FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081819
   APPLICATION NUMBER: 60/085339 FILING DATE: 1998-05-13
                                      APPLICATION NUMBER: 60/084643 FILING DATE: 1998-05-07
                                                                                                                FILING DATE: 1998-05-07
                                                                                                                                                                    APPLICATION NUMBER: 60/084598
                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/083495 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/081817
                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-23
                                                                                                                                                  1998-05-07
                                                                                                                                                                                                                                                                                               1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-09
                                                                                                                                                                                                                                                         1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-
                                                                                                                               60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/083499
                                                                                                                                                                                                                                                                                                                 60/084441
                                                                                                                                                                                                                                                                                                                                                                                         60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/081955
                                                                                                                                                                                                                                                                                                                                                              US-09-978-681A-523; Sequence 523, Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
APPLICANT: Botstein, Dav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT
                                                       APPLICANT
                                                                      APPLICANT
                                                                                         APPLICANT:
                                                                                                          APPLICANT:
                                                                                                                          APPLICANT
                                                                                                                                               APPLICANT
                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                    APPLICANT
                   APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 IGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OR APPLICATION NUMBER: 60/085582
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/08570
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085689
OR APPLICATION NUMBER: 60/085689
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085579
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085580
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085573
OR FILING DATE: 1998-05-15
OR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60 FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60 FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                          LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKYTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   h 100.0%; score 1806; DB 5;
Similarity 100.0%; Pred. No. 2.2e-113;
                          Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                      Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
                                                                                                                                                                               Gao,
                                                                                     Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                               Filvaroff, Ellen
Napier, Mary A
             Kuo, Sophia S.
                                                                                                                                                                                                                                                                     Botstein, David
Desnoyers, Luc
                                                                                                                                                                                                Fong, Sherman
                                                                                                                                                                                                                                                       Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                             Wei-Qiang
                                                                                                                                                                                                                                                                                                     יסי.
                                                                                                                                                                                                                                                                                                                                                                  US/09978681A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
```

240

PRIOR PRIOR

PRIOR PRIOR

PRIOR

PRIOR

PRIOR PRIOR

PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR PRIOR

PRIOR PRIOR

PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR

PRIOR PRIOR PRIOR

PRIOR

PRIOR

PRIOR PRIOR

PRIOR

PRIOR

PRIOR

PRIOR PRIOR

Mismatches

0;

Indels Length

0; Gaps

```
PRIOR APPLICATION NUMBER: 60/079939
PRIOR FILLING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
PRIOR APPLICATION NUMBER: 60/079294
PRIOR APPLICATION NUMBER: 60/079656
PRIOR APPLICATION NUMBER: 60/079656
PRIOR APPLICATION NUMBER: 60/079664
PRIOR APPLICATION NUMBER: 60/079689
PRIOR APPLICATION NUMBER: 60/079689
PRIOR APPLICATION NUMBER: 60/079689
PRIOR APPLICATION NUMBER: 60/079683
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR ETLING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR ETLING DATE: 1997-11-13
PRIOR ETLING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/07/
PRIOR FILING DATE: 1998-03-13
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/07/
PRIOR APPLICATION NUMBER: 60/07/
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR FILING DATE: 1998-03-20
PRIOR PILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: U5/09/978,681A CURRENT FILING DATE: 2002-03-19 PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30 PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: P2630P1C18
CURRENT APPLICATION NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                        R FILING DATE: 1998-03-31
PR APPLICATION NUMBER: 60/01
PR FILING DATE: 1998-03-31
PR APPLICATION NUMBER: 60/01
PR APPLICATION NUMBER: 60/01
PR FILING DATE: 1998-03-01
PR FILING DATE: 1998-04-01
                                                                                                                                                                                                               APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/080105
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080107
APPLICATION
FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     James;
                       NUMBER: 60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            William
1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Timothy A.
                                                                                                                                                                 60/080165
                                                                     60/080327
                                                                                                                   60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic
                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083554
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083558
PRIOR REILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083559
PRIOR PRIOR PRIOR PRIOR APPLICATION NUMBER: 60/083559
                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                             PRIOR FILING DATE: 1998-0: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: PRIOR APPLICATION |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-04-21 PRIOR APPLICATION NUMBER: 60/082569
     DR FILING DATE: 1998-05-06
DR APPLICATION NUMBER: 60/01
DR FILING DATE: 1998-05-06
DR APPLICATION NUMBER: 60/01
DR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-29
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-29
                                                                                                                                                    APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-22
                                                                                                                                                                                                     APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04-27
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-23 APPLICATION NUMBER: 60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/081819
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081955
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER: 60/081071
                                                                                                                                                                                                                                                        1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-08
                                                                                                                                                                              60/084366
                                                                                 60/084441
                                                                                                                                                                                                                              60/083742
                                 60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081203
```

```
US-09-978-757A-523; Sequence 523, Application US/09978757A; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
             APPLICANT:
                                                                        APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION UNMBER: 60/085897
PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DR FILING DATE: 1998-05-07

PR APPLICATION NUMBER: 60/084598

DR FILING DATE: 1998-05-07

PR APPLICATION NUMBER: 60/084600

DR FILING DATE: 1998-05-07

PR APPLICATION NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/085339 FILING DATE: 1998-05-13 APPLICATION NUMBER: 60/085338 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/085689 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                             LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                             LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                         LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                   LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYT@VASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYT5;SVQTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       {\tt NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
             Ferrara, Napoleon
                                Eaton, Dan
                                                   Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1806; DB 5;
Pred. No. 2.2e-113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    * ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                 PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079656
PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/079664
PRIOR APPLICATION NUMBER: 60/079689
PRIOR APPLICATION NUMBER: 60/079689
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079663
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079786
                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/077649
PRIOR EILING DATE: 1998-03-11
PRIOR PAPLICATION NUMBER: 60/07791
PRIOR APPLICATION NUMBER: 60/078004
PRIOR APPLICATION NUMBER: 60/078004
PRIOR FILLING DATE: 1998-03-13
PRIOR APPLICATION NUMBER: 60/078886
PRIOR FILLING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/078930
PRIOR APPLICATION NUMBER: 60/078910
PRIOR APPLICATION NUMBER: 60/078910
PRIOR APPLICATION NUMBER: 60/078939
PRIOR FILLING DATE: 1998-03-20
PRIOR FILLING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR PILING DATE: 1998-03-10
                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION UNMBER: 60/077641
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/978,757A CURRENT FILING DATE: 2002-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: P2630P1C26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICATION NUMBER: 60/079920 FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/079923
                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, P. Mic
Wood, William I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Napier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sherman
                                                                 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . Mickey
                                                                     60/079786
3-27
```

Nucleic

Ωy Βb δÃ B δÃ В Q 밁 Qy 밁 20

PRIOR FILING DATE: 1998-03-30
PRIOR APPLICATION NUMBER: 60/080105
PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/080107
PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/080165

PRIOR PRIOR

FILING DATE: 1998-0 APPLICATION NUMBER:

1998-03-31 1998-03-31

PRIOR FILING DATE: 1998-0: PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-04 PRIOR APPLICATION NUMBER:

1998-04-01

PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0

1998-04-01

60/080334 60/080333

PRIOR

FILING DATE:

1998-04-01

60/080328 60/080327 60/080194

```
Db
                                                                         Qy
                                                                                                            В
                                                                                                                                            Qy
                                                                                                                                                                                  B
                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60
PRIOR FILING DATE: 1998-05-1
PRIOR APPLICATION NUMBER: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/084627
PRIOR TILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILING DATE: NUMBER: 60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: PRIOR APPLICATION N PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/085582
PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING PRIOR APPLICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/084598
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084637
     301
                                      241
                                                                         241
                                                                                                            181
                                                                                                                                               181
                                                                                                                                                                                  121
                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R FILING DATE: 1998-05-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-05-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                           ш
                                                                                                                                                                                                                                                                                                                                         1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFFKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60
FILING DATE: 1998-05-1
APPLICATION NUMBER: 60
FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-05-APPLICATION NUMBER: 61 FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60 FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/0
LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/083742 FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/083500
FILING DATE: 1998-04-29
                                                                                                                         SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                     NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                   LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                   LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                       SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                               NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                               NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                   NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                                     MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                               al Similarity
344; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATE:
                                                                                                                                                                                                                                                                                                                                                                                             100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER: 60/085697: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/084640
                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                            Score 1806; DB 5;
Pred. No. 2.2e-113;
                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                             Indels
```

PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER: FILING DATE: 1998-04 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-29

1998-04-29

60/083495 60/083392

OR APPLICATION NUMBER: 60/083496
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083499
OR APPLICATION NUMBER: 60/083545
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08354
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083554
OR APPLICATION NUMBER: 60/083558

APPLICATION FILING DATE: FILING DATE:

NUMBER: 60/083559

1998-04-29

PRIOR PRIOR

OR APPLICATION NUMBER: 60/082797
OR FILLING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082796
OR FILING DATE: 1998-04-23
OR APPLICATION NUMBER: 60/083336
OR FILING DATE: 1998-04-27
OR APPLICATION NUMBER: 60/083322
OR FILING DATE: 1998-04-28

PRIOR

FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082804
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082700
FILING DATE: 1998-04-22

344; 0; Gaps

0;

180

300

240

120

60 60 PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

OR APPLICATION NUMBER: 60/081819
OR FILING DATE: 1998-04-15
OR PILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081952
OR FILING DATE: 1998-04-15
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/082568
OR FILING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/082569
OR APPLICATION NUMBER: 60/082569
OR APPLICATION NUMBER: 60/082569
OR APPLICATION NUMBER: 60/082704

PRIOR PRIOR

PRIOR

FILING DATE:

APPLICATION NUMBER: FILING DATE: 1998-0

1998-04-15 1998-04-15

60/081817

PRIOR

APPLICATION NUMBER: 60/081955

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

OR APPLICATION NUMBER: 60/081195
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081203
OR FILING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081229
OR FILING DATE: 1998-04-09

PRIOR

PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/081049
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081071
FILING DATE: 1998-04-08

PRIOR

APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08

60/081070

PRIOR

```
RESULT 5
US-09-978-564A-523
Commence 523, Application US/09978564A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/978,564A
CURRENT FILING DATE: 2001-10-16
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/06250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR PPLICATION NUMBER: 60/066311
PRIOR PILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/067450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
                                                                            PRIOR APPLICATION NUMBER: 60/078939
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Ashkenazi, APPLICANT: Baker, Ke
                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                           APPLICATION NUMBER: 60/078004
FILING DATE: 1998-03-13
APPLICATION NUMBER: 60/078886
FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078936
                                                                                                                                               APPLICATION NUMBER: 60/1
FILING DATE: 1998-03-20
                                                                                                                                                                                           FILING DATE: 1998-03-20
                                     APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kljavin, Ivar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gurney, Austin I
Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sherman
                                                                                                                                                                                                                                                                                                                        1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kevin P.
                                                         1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ellen
                                                                                                                                                                    60/078910
                                                                                                                                                                                                                                                                                                                                             60/077791
                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/082704
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082804
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082700
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082797
PRIOR FILING DATE: 1998-04-22
PRIOR FILING DATE: 1998-04-22
PRIOR FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081819
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081952
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081838
PRIOR FILING DATE: 1998-04-15
                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/082796
                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/082568
PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082569
PRIOR FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/079728
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-03-
PRIOR APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-03-
                                                                                                        APPLICATION NUMBER: 60/083336
FILING DATE: 1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/080333

FILING DATE: 1998-04-01

APPLICATION NUMBER: 60/080334

FILING DATE: 1998-04-01
                                         FILING DATE: 1998-04-28
APPLICATION NUMBER: 60/083392
                                                                                 APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/080194
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080327
APPLICATION NUMBER: 60/083495
                                                                                                                                                      FILING DATE: 1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/081049 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/081070
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/080328 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/
FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/079664
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                         1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : 60/079786
)3-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/080165
```

1998-04-29

```
γ
                                        Дb
                                                                        QУ
                                                                                                                                            22
                                                                                                             밁
                                                                                                                                                                                   Matches 344;
                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/1
PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/085580
                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION UNMBER: 60/084627
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/085700 PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/084643 PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-0-PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/083545 PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/083554
121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                          61
                                                                        61
                                                                                                                      1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                             ۳
                                                                                                                                                                                                                                                      FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/084441
FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085323 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/084639
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-05
APPLICATION NUMBER: 60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083742 FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083559 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/084366
                               NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                       NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIBIQNVDVYDEGPYTCSVQTD 120
                                                                                                      \tt MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                  Similarity
                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-29
                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                       60/085697
                                                                                                                                                                                                                                                                                                          60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/083496
                                                                                                                                                                                0;
                                                                                                                                                                                             Score 1806; DB 5; Pred. No. 2.2e-113;
                                                                                                                                                                              Mismatches
                                                                                                                                                                              0;
                                                                                                                                                                                                             Length
                                                                                                                                                                              Indels
                                                                                                                                                                                                             344;
                                                                                                                                                                            0;
                                                                                                                                                                        Gaps
```

60

밁

61

NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIBIQNVDVYDEGPYTCSVQTD 120

0;

```
QΥ
                                               DЪ
                                                                            Qy
                                                                                                                                                                                         ; ORGANISM: Homo sapiens US-09-999-831A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-999-831A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 624

Prior Application removed - See File Wrapper or Palm SEQ ID NO 523

LENGTH: 344
                                                                                                             Matches
                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 523, Application US/09999831A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                 FILE REFERENCE: P2630P1C68
CURRENT APPLICATION NUMBER: US/09/999,831A
CURRENT FILING DATE: 2002-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6
NRYTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIBIQNVDVYDBGPVTCSVQTD 120
                                         MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                           MKTIQPKMHNSISWAIFTGLAALCLFQGYPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                 Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                              Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Botstein, David
Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kuo, Sophia S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eaton, Dan
                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nicholas F
                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                               Acids Encoding the Same
                                                                                                           0;
                                                                                                                        Score 1806;
Pred. No. 2.
                                                                                                         Mismatches
                                                                                                                        2.2e-113;
                                                                                                                                          DB 5;
                                                                                                           0,
                                                                                                                                     Length 344;
                                                                                                         Indels
                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                 Nucleic
                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                        0
```

```
멍
                                     Qγ
                                                                         멍
                                                                                                       Ωy
                                                                                                                                                                                                                               US-09-999-829A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-999-829A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QУ
                                                                                                                                                                                                                                                                                               Prior Application removed - See File Wrapper or Palm SEQ ID NO 523
                                                                                                                                                             Best
                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 523, Application US/09999829A
                                                                                                                                                                                                                                                                                                                                               APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFRENCE: P2630P1061
CURRENT APPLICATION NUMBER: US/09/999,829A
CURRENT FILING DATE: 2002-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                               LENGTH: 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
61 NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                     61 NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                         ш
                                                                                     1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                  MKTTQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                             344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEDEVLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGIGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Grimaldi, J. Christopher Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ferrara, Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Desnoyers, Luc
                                                                                                                                         100.0%; Score 1806; ilarity 100.0%; Pred. No. 2. Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ellen
                                                                                                                                         Mismatches
                                                                                                                                                       2.2e-113;
                                                                                                                                                                         DB 5;
                                                                                                                                         0;
                                                                                                                                                                      Length
                                                                                                                                       Indels
                                                                                                                                     0;
                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                     0;
```

δÃ В Qy

61 NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120

1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60

60

Matches

344; Conservative

0;

Mismatches

Length 344; Indels

0; Gaps

0;

```
US-09-978-375A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-978-375A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                               Prior Application removed
NUMBER OF SEQ ID NOS: 624
SEQ ID NO 523
LENGTH: 344
TYPE: PRT
Query Match 100.0%; Score 1806; DB 5; Best Local Similarity 100.0%; Pred. No. 2.2e-113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 523, Application US/09978375A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/978,375A CURRENT FILING DATE: 2002-04-19
                                                                                                                                                                                                                                   TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 SEDEYLEIQGITREQSGDYECSASNDVAAAPVVRRVKVTVNVPPXISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fong,
                                                                                                                                                                                                                                                                                                                                       Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ferrara, Na
Filvaroff,
                                                                                                                                                                                                                                                                                                                            Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                  Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                   Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                   Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sherman
                                                                                                                                                                                                                                                                                                                                                                                                 Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ellen
                                                                                                                                                                               See File Wrapper or Palm
```

```
CURRENT APPLICATION NUMBER: US/09/978,423A CURRENT FILING DATE: 2002-05-16
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILLING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILLING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILLING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-978-423A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Дò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
APPLICANT: Botstein, Dav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 523, Application US/09978423A
                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C21
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                   FILING DATE: 1998-03 APPLICATION NUMBER:
                                                                                                        APPLICATION NUMBER: 60/077450
FILING DATE: 1998-03-10
                                                                                                                                             APPLICATION NUMBER: 60/066364
FILING DATE: 1997-11-21
APPLICATION NUMBER: 60/077649 FILING DATE: 1998-03-11
                                     FILING DATE:
                                                                                        APPLICATION NUMBER: 60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVÖQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grimarur,
Gurney, Austin L.
Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paoni, Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Baker Kevin P.
Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sophia S.
                                                                    1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sherman
                                   1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Napoleon
                                                   60/077641
                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                              PRIOR
PRIOR
PRIOR
                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-08
                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/080107
PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: PRIOR APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/081071
PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079728
PRIOR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1998-03-20 PRIOR APPLICATION NUMBER: 60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/078910 PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/078886 PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-03-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/077791 PRIOR FILING DATE: 1998-03-12
                                                                          FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-15
                                                                                                                             FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                             APPLICATION NUMBER: 60/081229
FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081955
FILING DATE: 1998-04-15
   APPLICATION NUMBER: 60/
FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/080194
FILING DATE: 1998-03-31
                                                          APPLICATION NUMBER:
                                                                                                                                                                    APPLICATION NUMBER: 60/081819
                                                                                                                                                                                          FILING DATE: 1998-04-15
                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/080105
                                       1998-04-21
                                                                                                                                                                                                                                                                                                                                               1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-26
                   60/082569
                                                                                            60/081838
                                                                                                                                                                                                          60/081817
                                                        60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                          60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/078936
```

```
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                 FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/085323
FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/08582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/084441
FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/084637
                                                                                                 APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                     APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/085338
                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/085339
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084643
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/084639 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083742 FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083545
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/083496 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083322
FILING DATE: 1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083336
FILING DATE: 1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082804
APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15
                                 FILING DATE:
                                               FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                 APPLICATION NUMBER:
                                                                                                                                   FILING
                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/082797
                                                                                                                                   DATE:
                               NUMBER: 60/085573
1998-05-15
                                                               1998-05-15
                                                                                                                                   1998-05-15
                                                                                                                                                                                                    1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-22
                                                                               60/085580
                                                                                                                                                   60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Se XXX
```

```
RESULT 10
US-10-013-921A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
GENERAL I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
            CURRENT APPLICATION NUMBER: US/10/013,921A
CURRENT FILING DATE: 2002-03-19
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
                                                                                                   TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE; P2630P1C84
                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Ashkenazi, APPLICANT: Baker Kevi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/085697 PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                  APPLICANT:
                                                                                                                                                                APPLICANT:
                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                   APPLICANT
                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                سر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          344;
                                                                                                                                                           Shelton, David L. Stewart, Timothy A. Tumas, Daniel Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                Fong,
                                                                                                                                               Williams, P. Mic
Wood, William I
                                                                                                                                                                                                                                                                                                             Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                    Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                Filvaroff, Ellen
                                                                                                                                                                                                                                         Paoni,
                                                                                                                                                                                                                                                        Pan, James;
                                                                                                                                                                                                                                                                   Napier, Mary A.
                                                                                                                                                                                                                                                                                               Kljavin,
                                                                                                                                                                                                                                                                                                                                                                           Goddard
                                                                                                                                                                                                                                                                                                                                                                                        Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                       Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                       Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10013921A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                        Margaret Ann
                                                                                                                                                                                                                                                                                   Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                    Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherman
                                                                                                                                                                                                                                       Nicholas F
                                                                                                                                                                                                                                                                                                                                                                          Audrey
                                                                                                                                                                                                                                                                                                 Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Avi
in P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
60/064249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1806; DB 5;
Pred. No. 2.2e-113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                  Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

PRIOR APPLICATION NUMBER: 60/08
PRIOR APPLICATION NUMBER: 60/08
PRIOR APPLICATION NUMBER: 60/08
PRIOR TILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-08
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/08
PRIOR APPLICATION NUMBER: 60/08 PRIOR IOR FILING DATE: 1998-03-20

(OR APPLICATION NUMBER: 60/078910

OR FILING DATE: 1998-03-20

OR APPLICATION NUMBER: 60/078939

OR FILING DATE: 1998-03-20 OR FILING DATE: 1998-03
R APPLICATION NUMBER:
OR FILING DATE: 1000 R APPLICATION NUMBER: 6
R FILING DATE: 1998-04
R APPLICATION NUMBER: 6
R FILING DATE: 1998-04
R FILING DATE: 1998-04
R FILING DATE: 1998-04
R FILING DATE: 1998-04
R APPLICATION NUMBER: 6
R APPLICATION NUMBER: 6 PR FILING DATE: 1998-03-27
RE APPLICATION NUMBER: 60/07
RE FILING DATE: 1998-03-30
PR APPLICATION NUMBER: 60/07
PR FILING DATE: 1998-03-30
PR FILING DATE: 1998-03-31
PR FILING DATE: 1998-03-31 R APPLICATION NUMBER: 60, R FILING DATE: 1998-03-27 R APPLICATION NUMBER: 60, R FILING DATE: 1998-03-2 PR FILING DATE: 1998-03-20
PR APPLICATION NUMBER: 60/07
PR FILING DATE: 1998-03-25
PR APPLICATION NUMBER: 60/07
PR FILING DATE: 1998-03-26
PR FILING DATE: 1998-03-26 R FILING DATE: 1998-03-R APPLICATION NUMBER: 6 R FILING DATE: 1998-03-R APPLICATION NUMBER: 6 R FILING DATE: 1998-03-APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: 1998-03-2/
APPLICATION NUMBER: 60/079786 FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-27 APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER: 6 FILING DATE: 1998-03-APPLICATION NUMBER: 60 FILING DATE: 1998-03-FILING FILING DATE: 1998-03-APPLICATION NUMBER: 60/079689 FILING DATE: APPLICATION NUMBER: FILING DATE: 1998-03-1 APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: 1997-11 FILING DATE: NUMBER: 60: 1997-11-0 1998-04-01 1998-03-1 1998-03-1997-11-*UMBER: 60/081955 1998-04-15 1998-04-09 1998-03-1998-03-31 1998-03-1998-03-1998-04-09 1998-03-1997-11-03 60/079663 3-27 60/081229 60/081195 60/080334 60/080107 60/081203 60/080327 60/080194 60/081071 60/081049 60/081070 60/080333 60/080328 60/080165 60/080105 60/079923 60/079920 60/079728 60/079656 60/079294 60/078886 60/078004 60/077791 60/077649 60/077641 60/077632 60/077450 60/066364 60/065311

PRIOR ELLING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/084414
PRIOR FILING DATE: 1998-05-06
PRIOR PPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084637
PRIOR FILING DATE: 1998-05-07
PRIOR FILING DATE: 1998-05-07 PRIOR OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083500
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083742
OR FILING DATE: 1998-04-30
OR APPLICATION NUMBER: 60/084366 OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083495
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083496
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083499 R FILING DATE: 1998-05
R APPLICATION NUMBER: (
R FILING DATE: 1998-05
R FILING TOTAL
R APPLICATION NUMBER: (
R FILING DATE: 1998-05 R FILING DATE: 1998-05-R APPLICATION NUMBER: 6 R FILING DATE: 1998-05-R APPLICATION NUMBER: 6 R APPLICATION N R FILING DATE: R APPLICATION N APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083559 FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083545
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554
FILING DATE: 1998-04-29 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-23 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/ FILING APPLICATION NUMBER: APPLICATION FILING DATE: FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: 60/083392 FILING DATE: 1998-04-27 APPLICATION NUMBER: 60/083322 FILING DATE: 1998-04-28 FILING DATE: 1998-0: APPLICATION NUMBER: FILING DATE: 1998-04-APPLICATION NUMBER: 6 FILING DATE: APPLICATION FILING DATE: APPLICATION FILING DATE: 1998-04-1 APPLICATION NUMBER: 60 APPLICATION NUMBER: 60/081817 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081819 APPLICATION FILING DATE: 1998-04-1 DATE: N NUMBER: 60/UE: 1998-05-07 NUMBER: 60/085339 NUMBER: 60/084598: 1998-05-07 NUMBER: NUMBER: NUMBER: NUMBER: 1998-05-13 1998-05-13 1998-05-07 1998-05-07 1998-05-07 1998-05-13 1998-05-07 1998-04-1998-04-22 1998-04-1 60/085582 60/084640 60/084639 60/085323 60/085338 60/084643 60/084627 60/084600 60/083336 60/082796 60/082797 60/082700 60/082804 60/082704 60/082569 60/082568 60/081838 60/081952

```
US-10-013-929A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        р
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                            Sequence 523, Application US/10013929A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                APPLICANT:
                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                           APPLICANT:
                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                         APPLICANT:
                                                                    APPLICANT
                                                                                                              APPLICANT:
                                                                                                                             APPLICANT
                                                                                                                                           APPLICANT:
                                                                                                                                                        APPLICANT:
                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OR APPLICATION NUMBER: 60/085573
OR FILLING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085704
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085697
OR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/085579
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085580
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085700
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085689
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                             LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              {\tt NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NRYTRVAMLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPŸGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                               Ashkenazi, Avi
                       Pan, James;
Paoni, Nicholas F.
Roy, Margaret Ann
                                                                                                                                                                                                                Gao,
                                                                                                                                                                                                                          Fong,
                                                                                                                                        Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                      Gerritsen, Mary E. Goddard, Audrey
Shelton, David L.
Stewart, Timothy A.
                                                                               Kljavin, Ivar J. Kuo, Sophia S.
                                                                                                           Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                               Gerber, Hanspeter
                                                                                                                                                                                                                                           Filvaroff,
                                                                                                                                                                                                                                                                       Eaton,
                                                                                                                                                                                                                                                                                                  Botstein, David
                                                                   Napier,
                                                                                                                                                                                                                                                        Ferrara,
                                                                                                                                                                                                                                                                                     Desnoyers,
                                                                                                                                                                                                                                                                                                                 Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                              Wei-Qiang
                                                                                                                                                                                                                             Sherman
                                      Nicholas F.
                                                                                                                                                                                                                                                                         Dan
                                                                 Mary A.
                                                                                                                                                                                                                                           Napoleon
f, Ellen
                                                                                                                                                                                                                                                                                     Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 1806; DB 6; 100.0%; Pred. No. 2.2e-113; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             , 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
```

0

```
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/06364
PRIOR PELLING DATE: 1997-11-21
                                                                                                                                    PRIOR APPLICATION NUMBER: 60/PRIOR FILING DATE: 1998-03-31
                                     PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/080328
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/080333
PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-0:
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: P2630P1C89
CURRENT APPLICATION NUMBER: US/10/013,929A
CURRENT FILING DATE: 2002-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/0
PRIOR APPLICATION NUMBER: 60/0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/0
PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 6 PRIOR FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/077641
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/077450 PRIOR FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/078886 PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/062250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080334
FILING DATE: 1998-04-01
                                   FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/
FILING DATE: 1998-04-01
                                                                                                                                                                                                   APPLICATION NUMBER: 60, FILING DATE: 1998-03-31
                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/
FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/0
FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/079786
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/079663 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/(FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/078004 FILING DATE: 1998-03-13
                                                                                                                                    APPLICATION NUMBER: 60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumas, Daniel
Williams, P. M
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . Mickey
                                                                                                                                                                                60/080194
                                                                                                                                                                                                                          60/080165
                                                                                                                                                                                                                                                                60/080107
                                                                                                                                                                                                                                                                                                        60/080105
                                                                                                                                                                                                                                                                                                                                              60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/077632
```

PRIOR PRIOR

```
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-04
PRIOR APPLICATOR
PRIOR APPLICATOR
PRIOR APPLICATOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OR APPLICATION NUMBER: 60/083496
TOR FILING DATE: 1998-04-29
TOR APPLICATION NUMBER: 60/083499
TOR FILING DATE: 1998-04-29
TOR APPLICATION NUMBER: 60/083545
TOR FILING DATE: 1998-04-29
TOR FILING DATE: 1998-04-29
TOR FILING DATE: 1998-04-29
TOR APPLICATION NUMBER: 60/083558
TOR APPLICATION NUMBER: 60/083558
TOR APPLICATION NUMBER: 60/083559
TOR APPLICATION NUMBER: 60/08359
TOR FILING DATE: 1998-04-29
TOR FILING DATE: 1998-04-29
TOR FILING DATE: 1998-04-29
TOR FILING DATE: 1998-04-29
TOR APPLICATION NUMBER: 60/08359
TOR APPLICATION NUMBER: 60/08359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/081955
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081817
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081819
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081838
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/082568
OR FILING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/082569
OR FILING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/082704
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082704
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082700
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082797
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082797
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082797
OR FILING DATE: 1998-04-23
OR APPLICATION NUMBER: 60/08336
OR FILING DATE: 1998-04-27
OR FILING DATE: 1998-04-27
OR FILING DATE: 1998-04-27
OR FILING DATE: 1998-04-27
OR APPLICATION NUMBER: 60/08332
OR APPLICATION NUMBER: 60/08332
OR APPLICATION NUMBER: 60/08332
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08332
                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083742
FILING DATE: 1998-04-30
APPLICATION NUMBER: 60/084366
FILING DATE: 1998-05-05
                                                                                                                                                                                                              APPLICATION NUMBER: 60/
FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/084414 FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083495 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/081195
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 1998-04
                    APPLICATION FILING DATE:
                                                                                  APPLICATION :
FILING DATE:
                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE: 1998-04-08
                        DATE:
                                                                                  NUMBER: 60/084640: 1998-05-07
                                                   NUMBER: 60/084598
                        1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-08
                                                                                                                                                                               60/084639
                                                                                                                                                                                                                                                60/084637
                                                                                                                                                                                                                                                                                                              60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 12
US-10-013-918A-523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILLING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085338
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILLING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085582
PRIOR FILLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085700
PRIOR FILLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085689
PRIOR APPLICATION NUMBER: 60/085679
PRIOR FILLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085580
PRIOR APPLICATION NUMBER: 60/085580
PRIOR APPLICATION NUMBER: 60/085573
                                                                                                APPLICANT: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 344
                                                                                                                                                                                                                                                                                                                                                                     Sequence 523, Applic GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
PRIOR FILING DATE: 1998-05-15
          APPLICANT:
                                         APPLICANT:
                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/084600 PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 344; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ⊣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MKTIQPKNHNSISWAIETGLAALCLEQGVPVRSGDATEPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEDEYLE IQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NRVTRVAMILNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                                                                                                                                                                                                                                                Ashkenazi, Avi
Raker Kevin P.
                                                                                            Fong,
Gerritsen,
                                                                                                                        Ferrara, Napoleon
Filvaroff, Ellen
                                                                                                                                                                                                                               Botstein, David
Desnoyers, Luc
                              Gerber, Hanspeter
                                                                    Gao, Wei-Qiang
                                                                                                                                                                                                    Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                    Application US/10013918A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                       Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1806; DB o;
Pred. No. 2.2e-113;
```

Length Indels

344; 0, Gaps

0

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR

30C 300 240

180

240

180 120 120 60 60

```
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630F1C77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: APPLICANT:
                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17 PRIOR APPLICATION UNMBER: 60/064249 PRIOR FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/013,918A CURRENT FILING DATE: 2002-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                   OR APPLICATION NUMBER: 60/078886
OR FILING DATE: 1998-03-20
OR PRILING DATE: 1998-03-20
OR APPLICATION NUMBER: 60/078916
OR APPLICATION NUMBER: 60/078910
OR APPLICATION NUMBER: 60/078939
OR APPLICATION NUMBER: 60/078939
OR FILING DATE: 1998-03-20
OR FILING DATE: 1998-03-20
                                                                                                                           APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079920
                                                                                                                                                                                  APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-0:
APPLICATION NUMBER:
FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/065311 FILING DATE: 1997-11-13
                        APPLICATION NUMBER: 60, FILING DATE: 1998-03-3: APPLICATION NUMBER: 60,
                                                                                     FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/079923
                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/077791 FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/066364 FILING DATE: 1997-11-21
                                                                             FILING DATE:
                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/079663
                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wood,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumas, Daniei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             James;
                        NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              William I.
                                                                                                                                            NUMBER: 60/079786
1998-03-27
                                                                             1998-03-30
                                                                                                                                                                                                                      1998-03-
                                                                                                                                                                                                                                                        1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Timothy A.
                                                                                                                                                                                                                                                                         60/079689
                                                                                                                                                                                                                                                                                                                                                                                    60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/078004
                                                        60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic
                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/080328 PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/080327 PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OR APPLICATION NUMBER: 60/082568
OR FILLING DATE: 1990-04-21
OR APPLICATION NUMBER: 60/082569
OR FILLING DATE: 1990-04-21
OR APPLICATION NUMBER: 60/082704
OR FILLING DATE: 1990-04-22
                                                                                   FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                   APPLICATION NUMBER: 60/083554
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083558
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/083322
FILING DATE: 1998-04-28
APPLICATION NUMBER: 60/083392
FILING DATE: 1998-04-9
APPLICATION NUMBER: 60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/082804
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082700
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081952
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081838
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-08
                              APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083742
                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083336
FILING DATE: 1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/082797
FILING DATE: 1998-04-72
APPLICATION NUMBER: 60/082796
FILING DATE: 1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/081817
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081229
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/080165
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080194
FILING DATE: 1998-03-31
FILING DATE:
APPLICATION I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-15
```

60/081955

60/081195

NUMBER:

60/084366

1998-04-30

60/083559

1998-04-29

60/083545 60/083499 60/083496

```
δÃ
                                                                                DЬ
                                                                                                         δÃ
                                                                                                                                                                 δÃ
                                                                                                                                                                                                 В
                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                           γQ
                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                         Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/085580 PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                       301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                241
                                                                                                                                   181 SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                    181
                                                                                                                                                                                                 121
                                                                                                                                                                                                               121 NHPKTSRVHLIVOVSPKIVEISSDISINEGNNISLTCIATGRDEPTVTWRHISPKAVGFV
                      301
                                                                                                                                                                                                                                                                       61 NRVTRVAWLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OR FILING DATE: 1998-05-05
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                        61 NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-05
APPLICATION NUMBER:
FILING DATE: 1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-0
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-05 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-07
                                                                                             LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                        SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKYTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                        MKTTQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                              NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                              LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                              LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     миявёк: 60/085704
: 1998-05-15
NПитътътъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER: 60/085323
1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER: 60/084600
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER: 60/084598
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-15
                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 1806; DB 6; 100.0%; Pred. No. 2.2e-113; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084414
                      344
                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                    Length
227
                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                              180
                                                                                                                                                                                                                           180
                                                                                                         300
                                                                                                                                     240
                                                                                                                                                                 240
                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                        0;
```

US-10-017-082A-523

RESULT

```
Sequence 523, Application US/10017082A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids encoding the Same FILE REFERENCE: P2630P1C71
CURRENT APPLICATION NUMBER: US/10/017,082A
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: 09/918585
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/077641
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
                                                                                                            PRIOR APPLICATION NUMBER: 60/079656
                                                                                                                                  PRIOR APPLICATION NUMBER: 60/079294 PRIOR FILING DATE: 1998-03-25
                                                                                                                                                                                                                                   PRIOR FILING DATE: PRIOR APPLICATION N
                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/078886 PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1998-0
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                     APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-20
                APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27
                                                                                                                                                                                                             APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20
                                                    APPLICATION NUMBER: 60/079664
FILING DATE: 1998-03-27
                                                                                            FILING DATE:
FILING DATE:
APPLICATION |
                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Roy, Margaret Ann
shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerritsen, Mary
Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ferrara, Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eaton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nicholas F
                                                                                            1998-03-26
                                                                                                                                                                                                                                                     1998-03-20
                                                                                                                                                                                                                                                                                                                                  1998-03-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                סי
                                                                                                                                                                                                                                                                                                                                60/078004
3-13
                                                                                                                                                                                           60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/065311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ħ
```

```
PRIOR
                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                       PRIOR
PRIOR
                                                                                                    PRIOR
                                                                                                                  PRIOR
PRIOR
                                                                                                                                               PRIOR
                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                      R FILING DATE: 1998-04-2:
R APPLICATION NUMBER: 60,
R FILING DATE: 1998-04-2:
R APPLICATION NUMBER: 60,
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083499
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-0 APPLICATION NUMBER:
                                          FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                      APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                APPLICATION NUMBER: 60/1
FILING DATE: 1998-04-28
                                                                                                                                               APPLICATION NUMBER: 60/083336 FILING DATE: 1998-04-27
                                                                                                                                                                            FILING DATE: 1998-04-23
                                                                                                                                                                                                                                                  FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/082569
FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/082568 FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081819
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/081955
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081817
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/081195
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/081071 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/081049 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-0.
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/080333 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/080327
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079728
                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DATE:
                         NUMBER: 60/083496
1998-04-29
                                                         1998-04-29
                                                                                      1998-04-29
                                                                                                                                                                                                         1998-04-22
                                                                                                                                                                                                                                                               1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .998-03-
                                                                                                                                                                                                                                                60/082700
                                                                         60/083495
                                                                                                                               60/083322
                                                                                                                                                                                                                      60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/080194
                                                                                                    60/083392
                                                                                                                                                                                        60/082796
                                                                                                                                                                                                                                                                                                                                                                                               60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                            60/081952
```

```
PRIOR APPLICATION NUMBER: 60/084637
PRIOR APPLICATION NUMBER: 60/084639
PRIOR APPLICATION NUMBER: 60/084640
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084598
PRIOR APPLICATION NUMBER: 60/084598
PRIOR APPLICATION NUMBER: 60/084600
PRIOR ETILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084627
PRIOR APPLICATION NUMBER: 60/084627
PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085339
PRIOR APPLICATION NUMBER: 60/085333
PRIOR APPLICATION NUMBER: 60/085333
PRIOR APPLICATION NUMBER: 60/085333
PRIOR APPLICATION NUMBER: 60/085333
PRIOR APPLICATION NUMBER: 60/085573
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085573
Query Match
Best Local
                                                                                                  PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-04-
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/083742
PRIOR FILING DATE: 1998-04-30
PRIOR APPLICATION NUMBER: 60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/083500 PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-04-29 PRIOR APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-05-07
                                                                                              FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085697
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/084414
FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083545
```

Дb Вþ Qγ Qγ рь Ş Matches Local Table 344; 181 SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240 121 121 61 61 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180 NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV NRVTRVAWLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120 MKTIQPKMHNSISWAIETGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID NRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120 100.0%; ilarity 100.0%; Conservative (0; Score 1806; DB 6; Pred. No. 2.2e-113; ; Mismatches 0; Indels 0; Gaps 60 180 60 0

Similarity

Length

344;

```
RESULT 15
US-10-121-049-376
                                                                                                                     밁
                                                                                                                                                    Qy
                                                                                                                                                                                       В
                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                            γ
                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
US-10-119-480-126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo Sapien 
US-10-119-480-126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         р
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
              Sequence 376, Application US/10121049 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 1806; DB 6; Best Local Similarity 100.0%; Pred. No. 2.2e-113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 126
LENGTH: 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 126, Application US/10119480 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT: Baker, Kevin P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 246
Prior April 2002-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: P3530P1C1
CURRENT APPLICATION NUMBER: US/10/119,480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                         241
                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                         241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSBHDYGNYTCVASNK
                                                                                                                     301
                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                  301 LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>__</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Prior Application removed -
                                                                                                                                                                                                                                                                                                                                                                                                                  NRYTRYAWLNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTGSVQTD 120
                                                                                                                                                                                                                                                        SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT 240
                                                                                                                                                                                                                                                                                                                         LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                  LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                     LQCEASAVPSAEFQWYKDDKRLIEGKKGYKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                              NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Watanabe, Colin L.
Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gurney, Austin L.
Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Desnoyers, Luc Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stephan, Jean-Philippe F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               See File Wrapper or Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AND NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
```

```
밁
                                                                                                     Š
                                                                                                                                          В
                                                                                                                                                                          δõ
                                                                                                                                                                                                               В
                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                  Ър
                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo Sapien US-10-121-049-376
                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 344; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 1806; DB 6; Best Local Similarity 100.0%; Pred. No. 2.2e-113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C17 CURRENT APPLICATION NUMBER: US/10/121/049 CURRENT FILING DATE: 2002-04-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prior Application removed - See File Wrapper or NUMBER OF SEQ ID NOS: 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 344
   301
                                    301
                                                                      241
                                                                                                         241
                                                                                                                                          181
                                                                                                                                                                            181
                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                      1 MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                  LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                             NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV 180
                                                                                                                                                                                                                                                                                                    NRVTRVAMINRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD 120
LGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                          SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                          SEDEYLEIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGT
                                                                                                                                                                                                           NHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFV
                                                                                                                                                                                                                                                                                NRVTRVAMLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTD
                                                                                                                                                                                                                                                                                                                                                     MKTIQPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTID
                                                                     LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                     LQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zhang, Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sherwood, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Palm
                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                      30C
                                                                                                       300
                                                                                                                                          240
                                                                                                                                                                          240
                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                      60
```

0;

Search completed: July 12, 2002, 00:42:36 Job time: 574 sec

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein
     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1639.5
1285.5
1268
                                                                                                                         1266
1259
936.5
931.5
297.5
2283.5
2283.5
2279.5
277.5
277.5
277.5
277.5
277.5
277.5
277.5
277.5
277.5
277.5
277.5
277.5
277.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
   254.5
254.5
249.5
246.5
243.5
243.5
241.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 ω 2 H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR_71:*
1: pir1:*
   133 5 5 6 8 1.1 13 5 5 6 7 12 6 8 12 13 5 5 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8 12 13 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      July 11, 2002, 23:01:37; Search time 67.53 Seconds (without alignments) 489.482 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-700-397-3
1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapop 10.0 , Gapext 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                283138 seqs, 96089334 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MKTIQPKMHNSISWAIFTGL.....RRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pir3:*
pir4:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pir2:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
 DB
                                    JEMOS9L
JEMOS9L
JEMOS9L
1JCHNL
1JATNC
LIJEUNG
LIJEUNG
LIJEUNG
JUNO635
S01998
LI38346
T20992
T43290
T43290
A547112
                                                                                                                                                                                                                                                                                                                                                                         $03199
JC1239
JC5519
JC4776
A31923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                156551
JC1238
JC4025
                                                                                                                                                                                                                                                                                                                                                           IJMSNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 283138
                                                                                                                                                                                                                                                neural cell adhesi
neural cell adhesi
neural cell adhesi
connectin/titin -
neural cell adhesi
neural cell adhesi
axonin 1 precursor
neural adhesion pr
                                 contactin precurso
                                                                  hemicentin precurs
transient axonal g
                                                                                                                        contactin precurso elastic titin - hu
                                                                                                                                                                                            neural
                                                                                                                                                                                                                                                                                                                                                     limbic-system-asso
amalgam protein pr
neural cell adhesi
                                                                                                                                                                                                                                                                                                                                                                                                         opioid-binding pro
50K glycoprotein p
                                                                                                                                                                                                                                                                                                                                                                                                                                        opioid-binding pro
opioid-binding cel
opioid-binding pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                neurotrimin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                     contactin
                                                                                                                                                            neural cell adhesi
                                                                                                                                                                             connectin
                                                                                                                                                                                                                neural cell
                                                                                                                                                                                                                                 neural
                                                                                                       hypothetical prote
                                                                                                                                                                                                                                 cell
                                                                                                                                                                                                cell
                                                                                                                                                                           ll adhesi
3B - chi
                                                                                                                                                                                                            adhesi
```

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
214.5	215.5	218.5	219	220.5	221	221.5	225	226	227.5	230.5	232.5	234.5	235	240	241.5
11.9	11.9	12.1	12.1	12.2	12.2	12.3	12.5	12.5	12.6	12.8	12.9	13.0	13.0	13.3	13.4
1070	1239	1612	1091	898	1896	862	4391	6642	1051	868	2783	1040	662	3707	1020
Ν	Н	2	N	N	Ν	N	N	2	N	N	2	N	2	2	2
JC4593	A32579	T30805	A58532	A40114	T08851	I49583	A38096	T29757	A39712	A46512	T34416	A34695	T16525	S18252	S05944
protein-tyrosine k	neuroglian - fruit	dutt1 protein - mo	glial cell membran	fasciclin II precu	Down syndrome cell	differentiation an	perlecan precursor	protein UNC-89 - C	kinase-like protei	CD22 homolog/B lym	hypothetical prote	axonal glycoprotei	hypothetical prote	heparan sulfate pr	neuronal cell surf

ALIGNMENTS

R:Struyk, A.F.; Canoll, P.D.; Wolfgang, M.J.; Rosen, C.L.; D'Eustachio, P.; Salzer J. Neurosci. 15, 2141-2156, 1995
A;Title: Cloning of neurotrimin defines a new subfamily of differentially expresse A;Reference number: 156551; MUID:95198094
A;Accession: 156551

C;Species: Rattus norvegicus (Norway rat)
C;Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 19-May-2000

neurotrimin - rat

C; Accession: I56551

A;Cross-references: EMBL;U16845; NID:g755184; PIDN:AAA67445.1; PID:g755185 C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor amino

A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: mRNA A;Residues: 1-344 <RES>

D, Qy Дb 20 밁 Qy Дb Qy 밁 Qy В QΥ Best Local Similarity Matches 312; Conserv Query Match 189 QGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAV 248 309 249 129 129 HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEI 188 309 MLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344 249 69 69 LNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128 12 ISWAIFTGLAALCLF---QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAM 68 9 LPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW 68 MLFGPGAVSEVNNGTSRRAGCIWLLPLLVLHLLLKF 344 HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEI 188 LNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128 Conservative 90.8%; 92.9%; 9; Mismatches Score 1639.5; DB 2 Pred. No. 1.7e-113; DB 2; Length 344; 12; Indels ψ Gaps ۲

RESULT 2
JC1238
opioid-binding protein (clone DUZ1) - rat
c;Species: Rattus norvegicus (Norway rat)
C;Date: 03-May-1994 #sequence_revision 03-May-1994 #text_change 19-May-2000

```
C;Accession: JC1238
R;Lippman, D.A.; Lee, N.M.; Loh, H.H.
Gene 117, 249-254, 1992
A;Title: Opioid-binding cell adhesion molecule (OBCAM)-related clones from a rat brain A;Reference number: JC1238; MUID:92347701
A;Accession: JC1238
                                                                                                                                                                                                                                                                                                                                                      R:Shark, K.B.; Lee, N.M. Gene 155, 213-317, 1995
A:Title: Cloning, sequencing and localization to A:Reference number: JC4025; MUID:95237612
A:Accession: JC4025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      opioid-binding cell adhesion protein - human
C;Species: Homo sapiens (man)
C;Date: 13-Jun-1995 #sequence_revision 14-Jul-1995 #text_change 17-Mar-2000
                                                                                                                                                      A; Map position: 11pter-11qter
C; Superfamily: carcinocut
                                                                                                                                                                                                                                                                         A;Molecule type: mRNA
A;Residues: 1-345 <SHA>
A;Crossreferences: GB:L34774; NID:g514373; PIDN:AAA36387.1; PID:g514374
A;Experimental source: brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      бÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Gene: OBCAM
C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Experimental source: brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-338 <LIP>
A; Cross-references: GB: M88709;
                    δã
                                                                                                                                                                                                                                    C; Genetics:
                                                                                                                                                                                                                                                  C; Comment: This protein binds opioid alkaloids
                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Accession: JC4025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                             A; Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Genetics:
                                                           Matches 240;
                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 SITLYGPGAVIDGVNSASRALACLWLSGTFFAHFFIKF 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 WINRSTILYAGNDKWSIDPRVIILVNTPTQYSIMIQNVDYYDEGPYTCSVQTDNHPKTSR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89
Loca1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            _
                                                                                                                                                                                                               GDB:OPCML; OBCAM; OPCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 MHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNKVTRVA 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VHLIVQVPPQIMNISSDITVNEISSVTLLCLAIGRPEPTVTWRHLSVKEGQGFVSEDEYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WINRSTILYAGNDKWCLDPRYVLLSNTQTQYSIEIQNYDYYDEGPYTCSYQTDNHPKTSR 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AVPMAEFQWFKEDTRLATGLDGVRIENKGRISTLTFFNVSEKDYGNYTCVATNKLGNTNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EISDIKRDQSGEYECSALNDVAAPDVRKVKITVNYPPYISKAKNTGVSVGQKGILSCEAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EIQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VHLIVQVSPKIYEISSDISINEGNNISLTCIATGRPEPTYTWRHISPK-AVGFVSEDEYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MYHPAYWIVFSATTALLFIPGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDDRVTRVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     242;
                                                                           Similarity
                                                                                                                                                      carcinoembryonic antigen; carcinoembryonic antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                           Conservative
                                                                                                                                                                                         GDB:251677; OMIM:600632
                                                                           70.2%;
71.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71.2%;
71.6%;
                                                           37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NID:g203245; PIDN:AAA40858.1; PID:g203246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35;
                                                         Score 1268; DB 2;
Pred. No. 4.2e-86;
7; Mismatches 56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 2.1e-87;
5; Misma+~t
                                                                                                                                                                                                                                                      Ħ
                                                                                                                                                                                                                                                                                                                                                                                             chromosome
                                                                                                                                                                                                                                                      the
                                                                                                                                                                                                                                                    presence of acidic lipids, exhibit
                                                                                             Length 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                         Indels 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                             11
                                                                                                                                                                                                                                                                                                                                                                                             of a cDNA encoding a huma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>, ...</u>
                                                                                                                                                      precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amino-termi
                                                                                                                                                      amino-term:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                         2
```

RESULT

U

```
opioid-binding protein OPCAM precursor - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 04-Dec-1992 #sequence_revision 04-Dec-1992 #text_change 17-Mar-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                 QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: EMBL:X12672; NID:g585; PIDN:CAA31192.1; PID:g586 C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: mRNA
A; Residues: 1-345 < SCH>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: S03199; MUID:89251576
A; Accession: S03199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBO J. 8, 489-495, 1989
A;Title: Molecular characterization of a new immunoglobulin superfamily protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Accession: S03199
R;Schofield, P.R.; McFarland, K.C.; Hayflick, J.S.; Wilcox, J.N.; Cho, T.M.; Roy, 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                           ρy
                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F;1-27/Domain: signal sequence #status predicted <SIG>F;28-345/Product: opioid-binding protein OPCAM #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Keywords: transmembrane protein
  밁
                                 QΥ
                                                                            В
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              308
311
                                      310
                                                                            251
                                                                                                                    250
                                                                                                                                                            191
                                                                                                                                                                                                  190
                                                                                                                                                                                                                                            131
                                                                                                                                                                                                                                                                                  131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        309 ITLYGPGAVIDGVNSASRALACLWLSGTLLAHFFIKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   129 HLIVQVPPQIMNISSDITVNEGSSVTLLCLAIGRPEPTVTWRHLSVKEGQGFVSEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       129 HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPK-AVGFVSEDEYLE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69
                                                                                                                                                                                                                                                                                                                           71
                                                                                                                                                                                                                                                                                                                                                                 71
                                                                                                                                                                                                                                                                                                                                                                                                           11
                                                                                                                                                                                                                                                                                                                                                                                                                                             14 WAIFTGLAALCLE----QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLN 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASA 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LNRSTILYAGNDKWSIDPRVIILVNTPTQYSIMIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
LYGPGAVIDGVNSASRALACLWLSGTLFAHFFIKF
                                   LFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                       SAEFOWYKDDKRLIEGKKGYKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIM
                                                                                                                                                          DIKRDQSGEYECSALNDVAAPDVRKVKITVNYPPYISKAKNTGVSVGQKGILSCEASAVP
                                                                                                                                                                                                GITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVP
                                                                                                                                                                                                                                                             IVQVSPKIVEISSDISINEGNNISLICIATGRPEPTVTWRHISPK-AVGFVSEDEYLEIQ 189
                                                                                                                                                                                                                                                                                                                                                               RSTILYAGNDKWCLDPRYYLLSNTQTQYSIEIQNVDYYDEGPYTCSVQTDNHPKTSRVHL 130
                                                                                                                                                                                                                                                                                                                                                                                                           WKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDDRVTRVAWLN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VPMAEFQWFKEETRLATGLDGMRIENKGRMSTLTFFNVSEKDYGNYTCVATNKLGNTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ISDIKRDQSGEYECSALNDVAAPDVRKVKITVNYPPYISKAKNTGVSVGQKGILSCEASA 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               {\tt LPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDDRVTRVAW}
                                                                                                                                                                                                                                        IVQVPPQIMNISSDVTVNEGSSVTLLCLAIGRPEPTVTWRHLSVKEGQGFVSEDEYLEIS 190
                                                                                                                                                                                                                                                                                                                        RSTILYAGNDKWSIDPRVIILVNTPTQYSIMIQNVDVYDEGPYTCSVQTDNHPKTSRVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          70.1%;
71.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1266; DB 2;
Pred. No. 5.9e-86;
4; Mismatches 57
345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 345;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83
                                                                                                                    309
                                                                                                                                                                                                  249
                                                                                                                                                                                                                                                                                                                             130
                                                                                                                                                                                                                                                                                                                                                                                                             70
                                                                                                                                                            250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amino-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
```

```
F;1-31/Domain: signal sequence #status predicted <SIG>
F;32-338/Product: 50K glycoprotein #status predicted <MAT>
F;46-113/Domain: immunoglobulin homology <IMM1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: GB:M88710; NID:g203247; PIDN:AAA40859.1; PID:g203248; GB:M88711; NIC;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor amino-termi C;Keywords: transmembrane protein
                                                                      F;146-199/Domain: immunoglobulin homology <IMM2> F;232-292/Domain: immunoglobulin homology <IMM3> F;40,136,148,279,287,300,315/Binding site: carbo
                                                                                                                                                                                                         C;Comment: This protein belongs to the IgLON's subfamily of cell adhesion molecules. C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor amino-te
                                                                                                                                                                                                                                                                                                                         A; Title: AvGp50, a predominantly axonally expressed glycoprotein, A; Reference number: JC5519; MUID:97225899
                                                                                                                                                                                                                                                                                                                                                                                                C;Date: 02-Sep-1997 #sequence_revision 05-Sep-1997 #text_change 17-Nov-2000 C;Accession: JC5519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Title: Opioid-binding cell adhesion molecule (OBCAM)-related A; Reference number: JC1238; MUID:92347701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Lippman, D.A.; Lee, N.M.; Loh, Gene 117, 249-254, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Rattus norvegicus (Norway rat)
C;Date: 03-May-1994 #sequence_revision 03
                                                                                                                                                                                       C; Keywords: glycoprotein
                                                                                                                                                                                                                                                  A; Experimental source: brain
                                                                                                                                                                                                                                                                    A; Residues: 1
                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                     A; Accession: JC5519
                                                                                                                                                                                                                                                                                                                                                          Mol. Brain Res. 44, 273-285, 1997
                                                                                                                                                                                                                                                                                                                                                                                R; Hancox, K.A.; Gooley, A.A.; Jeffrey, P.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Species: Gallus gallus (chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       50K glycoprotein precursor - chicken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Residues: 1-345 <LIP>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: JC1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Accession: JC1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      opioid-binding protein (clones SG8 and SG13) - rat
 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69 LNRSTILYAGNDKWSIDPRVIILVNTPTQYSIMIQNVDVVDEGPYTCSVQTDNHPKTSRV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69 LNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12 ISWAIFTGLAALCLF---QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HLIVQVPPQIMNISSDITVNEISSVTLLCLAIGRPEPTVTWRHLSVKEGQGFVSEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPK-AVGFVSEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDDRVTRVAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ITLYGPGAVIDGVNSASRALACLWLSGTFFAHFFIKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMLEGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VPMAEFQWFKEDTRLATGLDGVRIENKGRISTLTFFNVSEKDYGNYTCVATNKLGNTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISDIKRDQSGEYECSALNDVAAPDVRKVKITVNYPPYISKAKNTGVSVGQKGILSCEASA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASA 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                    -338 <HAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69.7%;
71.2%;
   56
   .0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           34;
   Score 936.5; DB 2;
Pred. No. 1.1e-61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1259;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-May-1994 #text_change 19-May-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No. 1.9e-85;
                                                                        carbohydrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                   Length 338
                                                                      (Asn) (covalent)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.
                                                                                                                                                                                                                                                                                                                                           SŢ
                                                                                                                                                                                                           precursor amino-termi
                                                                                                                                                                                                                                                                                                                                           ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    89
                                                                                                                                                                                                                                                                                                                                           member of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    307
                                                                        #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
                                                                      predic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        brain
                                                                                                                                                                                                                                                                                                                                           Ιg
                               δÃ
                                                                      망
                                                                                                        Ş
                                                                                                                                               В
                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                            QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮟
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
V
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Gene:
                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                       Query Match
195
                                     199
                                                                      135
                                                                                                            139
                                                                                                                                                 75
                                                                                                                                                                                       79
                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                       Local Similarity
```

YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258

SNISSDVTVNEGSNVTLVCMANGRPEPVITWRHLTPTGREFEGEEEYLEILGITREQSGK VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAYGFVSEDEYLEIQGITREQSGD 198 HDKWSLDPRVELEKRHSLEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI 134

194

YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD

254

NDKWCLDPRAVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138 LRLLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVLEDKNSKVAWLNRSGIIFAG LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG

180;

Conservative

60;

Mismatches

;08

Indels Length 338;

<u>ن</u>

Gaps

4;

78

74

51.6%;

Score 931.5; DB 2 Pred. No. 2.6e-61;

DB 2;

```
F;333-338/Region: hydrophobic
F;40,66,136,148,279,287,300,315/Binding site: carbohydrate (Asn) (covalent) #statu
F;42,115,142,164,171,220,231/Binding site: phosphate (Thr) (covalent) #status pred
F;95,192,204,236,310/Binding site: phosphate (Ser) (covalent) #status predicted
                                                                                                                C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen C;Reywords: brain; glycoprotein; membrane protein; phosphoprotein F;1-7/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Species: Homo sapiens (man)
C; Date: 10-May-1996 #sequence
                                                                                                                                                                                                                                 C; Genetics:
                                                                                                                                                                                                                                                              C; Comment: This is a neuronal surface glycoprotein distributed
                                                                                                                                                                                                                                                                                           A;Cross-references: GB:U41901; NID:g1276898; PIDN:AAC50569.1; PID:g1276899 A;Experimental source: brain
                                                                                                                                                                                                                                                                                                                                                                                                   A; Reference number: JC4776; MUID:96235133
A; Accession: JC4776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gene 170, 189-195,
                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1-338 < PIM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Title: cDNA cloning and structural analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R; Pimenta, A.F.; Fischer, I.; Levitt,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         imbic-system-associated membrane protein precursor -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79
                                                                                                                                                                                                             Lamp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VDNGSVSLAVPLWLLAASLLCLLSK 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNISSDITVNEGSNYTLYCMANGRPEPYITWRHLTPTGKEFEGEEEYLEILGITREQSGK 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAALCLE-QGVPVRSGDATFFKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DTR-INSANGLEIKSTGSQSLLMVANVTEEHYGNYTCVAANKLGVTNASLYLYRPG-TGR 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YECKAANEVASADVKQVRVTVNYPPTITESKSNEAATGRQALLPCEASAVPTPDFEWYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EDKWSLDPRVELEKRSPLEYSLRIQKVDVYDEGSYTCSVQTQHHPKTSQVYLIVQVPPKI 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LRLLCLLPTGLPVRSVD--FTRGTDNITVRQGDTAILRCFVEDRSSKVAWLNRSGIIFAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JC4776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #sequence_revision 16-Aug-1996 #text_change 19-May-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                            of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            human limbic-system-associate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                    in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ن
د
                                                                                                                                                                             precursor
                                                                                                                                                                                                                                                                    cortical and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4;
                                                                                                                                                                                                                                                                    suk
```

```
C;Species: Mus musculus (house mouse)
C;Datc: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 31-Dec-2000
C;Accession: A29673; S00382; A44290
R;Barthels, D.; Santoni, M.J.; Wille, W.; Ruppert, C.; Chaix, J.C.; Hirsch, M.R.; Fonted EMBO J. 6, 907-914, 1987
                                                                                                                                                                                                                                                                                                                             A;Title: Isolation and nucleotide sequence of mouse NCAM cDNA A;Reference number: A29673; MUID:87246524 A;Accession: A29673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    νQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Seeger, M.A.; Haffley, L.; Kaufman, T.C Cell 55, 589-600, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amalgam protein precursor - fruit fly (Drosophila melanogaster) C; Species: Drosophila melanogaster C; Date: 18-0ct-1989 **sequence_revision 18-0ct-1989 **text_change C; Date: 18-0ct-1989 **sequence_revision 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N; Alternate names: NCAM-120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-333 <S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Reference number: A31923; MUID: 89028670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Title: Characterization of amalgam: a member
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Accession: A31923
EMBO J. 7, 625-632, 1988
A;Title: Differential splicing and alternative polyadenylation generates distinct NCAMA;Reference number: S00382; MUID:88283628
                                                                                                                                   A;Cross-references: EMBL:Y00051; NID:g53342; PIDN:CAA68263.1; PID:g53343 R;Barbas, J.A.; Chaix, J.C.; Steinmetz, M.; Goridis, C.
                                                                                                                                                                                                                                     A; Molecule type: mRNA
A; Residues: 1-725 <BAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  neural cell adhesion molecule 1 precursor, GPI-anchored splice form -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IJMSNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: FlyBase:FBgn0000071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Gene: FlyBase:Ama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GB:M23561; NID:g156920; PIDN:AAA28367.1; PID:g156921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: A31923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        271 QSSRHHEVANTASSSGTTTSVLRIDSVGEEDFGDYYCNATNKLGHADARLHLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     264 EGKKGVKVENR-----PFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLF 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           314 I-NGSISLAVPLWLLAASLLCLLSK 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              319 VSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93 PKTGSAIYTFRIQNIEVSDMGPYECQVLVSATEKVTKKLSLQIKTPPVIAENTPKSTLVT 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ω
ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44 NVTVRQGESATLRCTIDN-RVTRVAWLNR-----STILYAGNDKWCLDPR--VVLLSN 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NDVAAPVVRRVKVTVNYPPYIS-EAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NGEGQPDKRLIRVEVEFRPQIAVQRPKIAQMVSHSAELECSVQGYPAPTVVWHKNGVPL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EGQNLELTCHANGFPKPTISWAREHNAVMP-AGGHLLAEPTLRIRSVHRMDRGGYYCIAQ 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EGNNISLTCIATGRPEPTVTWRH----ISPKAVGFVSEDEYLEIQGITREQSGDYECSAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TQTQ---YSIEIQNVDVYDEGPYTCSVQTDNHPK-TSRVHLIVQVSPKIVE-ISSDISIN 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DVVASVGDSVEFNCTVEEVGQLSVSWAKRPSESDTNSVVLSMRNILSLPDKRYNVTVTEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                l Similarity
87; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1-333 <SEE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16.5%; Score 297.5; 29.7%; Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.4e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of the immunoglobulin superfamily from Dr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                136;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 333;
                                                                                                                                                                                                                                                                                                                                                                                                                          that codes for a Mr 79,000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11;
                                                                                                                                                                                                                                                             neural cell adhesion molecule 1 precursor, long domain splice form - mouse N;Alternate names: NCAM-180 N;Contains: neural cell adhesion molecule, short domain splice form (NCAM-140) C;Species: Mus musculus (house mouse) C;Date: 31-Mar-1993 *sequence_revision 31-Mar-1993 *text_change 31-Dec-2000 C;Accession: A29673; S00844; S00384; A28281; A44290; S00383
                             EMBO J. 6, 907-914, 1987
A;Title: Isolation and nucleotide sequence of mouse NCAM cDNA that codes for a Mr A;Reference number: A29673; MUID:87246524
A;Accession: A29673
                                                                                                                                                                      R;Barthels, D.; Santoni, M.J.; Wille, W.; Ruppert, C.; Chaix, J.C.; Hirsch, M.R.; FEMBO J. 6, 907-914, 1987
```

A; Molecule type:

mRNA

```
C;Superfamily: neural cell adhesion molecule; fi
C;Keywords: alternative splicing; cell adhesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Rougon, G.; Marshak, D.R.

J. Biol. Chem. 261, 3396-3401, 1986

A;Title: Structural and immunological characterization of the amino-terminal A;Reference number: A44290; MUID:86140120
                                                                                      망
                                                                                                                                  Qy
                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                     δð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            F;519-596/Domain: fibronectin type III repeat homology <FN3A>
F;625-685/Domain: fibronectin type III repeat homology <FN3B>
F;61-96,139-189,235-288,330-386,427-480/Disulfide bonds: #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;34-98/Domain: signal sequence #status predicted F;34-98/Domain: immunoglobulin homology <IMM1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Map position:
A; Introns: 701/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Comment: NCAM mediates cell-cell adhesion via homophilic binding with another C; Comment: Several forms of NCAM are produced by alternative splicing. See also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein A; Residues: 20-36 < ROU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Residues: 642-656,'D',658-725 <BA2>A;Cross-references: EMBL:X07195
                                      ΩV
                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F;228-290/Domain:
F;263-272/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Gene: NCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: A44290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F;420-482/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;323-388/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F;161-165/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F;152-156/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           F;222,316,348,424,450,479/Binding site: carbohydrate (Asn) (covalent)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
445
                                                                                         386
                                                                                                                                    201
                                                                                                                                                                                  329
                                                                                                                                                                                                                              156
                                                                                                                                                                                                                                                                         269
                                                                                                                                                                                                                                                                                                                                                                  222
                                         261 RLIEGK-KGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML
                                                                                                                                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                                                                                                                                                                           44 NVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVV------LLSNTQ 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .91/Domain:
LLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESLEFIL
                                                                                      CTASNTIGQD-SQSIDLEFQYAPKLQGPVAVYTWEGNQVNITCEVFAYPSATISWFRDGQ
                                                                                                                                    CSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDK 260
                                                                                                                                                                             TCEASGDPIPSITWRTSTRNISSEEQDLDGHMYVRSHARVSS---LTLKSIQYRDAGEYM 385
                                                                                                                                                                                                                              TCIATGRPEPTVTWR-
                                                                                                                                                                                                                                                                         DSSEVTIRNVDKNDEAEYVCIAENKAGEQDASIHLKVFAKPKITYVENQTAMELEEQVTL
                                                                                                                                                                                                                                                                                                                     TQYSI: IQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISL 155
                                                                                                                                                                                                                                                                                                                                                                NATANLGQSVTLVCDADG-----FPEPTM-----SWTKDGEPIENEEEDERSRSSVS 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                              75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S00382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           heparin binding *status predicted immunoglobulin homology <IMM3> NCAM binding *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immunoglobulin homology <IMM4>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   heparin binding #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immunoglobulin homology <IMM2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.7%;
25.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 283.5; DF Pred. No. 4.2e-15; Mismatches 1
                                                                                                                                                                                                                         --HISPKAVGFVSEDEYLEIQGITREQSGDYE 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fibronectin type III repeat homology; on; duplication; heparin binding; meml
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                              130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
495
                                                                                                                                                                                                                                                                                                                                                                                                                                                              41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #status
                                                                                           444
                                                                                                                                                                                                                                                                         328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                              7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             predi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PIC
```

```
A;Residues: 1-548,'T',550-571,'T',573-574,'D',576-588,'MQPS',593,'S',595-599,'P',601,'L'
A;Cross-references: RMBL:Y00051; NID:953342; FIDN:CAA68263.1; FID:953343
R;Santoni, M.J.; Barthels, D.; Barbas, J.A.; Hirsch, M.R.; Steinmetz, M.; Goridis, C.; W
Nucleic Acids Res. 15, 8621-8641, 1987
N:Title: Analysis of CDNA clones that code for the transmembrane forms of the mouse neur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Map position: 9
A;Introns: 643/3; 701/1; 770/2; 809/2; 1076/2
C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; in C;Keywords: alternative splicing; brain; cell adhesion; duplication; heparin binding; F;1-19/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: EMBL:X06328; NID:g53322; PIDN:CAA29641.1; PID:g817984 R;Barbas, J.A.; Chaix, J.C.; Steinmetz, M.; Goridis, C. EMBO, J. 7, 625-632, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: IIKNA
A: Residues: 529-809,1077-1115 <SAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Genetics:
A; Gene: NCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Comment: NCAM mediates cell-cell adhesion via homophilic binding with another NCAM mol C; Comment: Several forms of NCAM are produced by alternative splicing. See also PIR: IJMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R:Barthels, D.; Vopper, G.; Wille, W. Ribarthels, D.; Vopper, G.; Wille, W. Ribarthels, Cards Res. 16, 4217-4225, 1988 nucleic Acids Res. 16, 4217-4225, 1988 A;Title: NCAM-180, the large isoform of the neural cell adhesion molecule of the mouse, A;Reference number: A28281; MUID:88247737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Title: Differential splicing and alternative polyadenylation generates distinct NCAM A; Reference number: S00382; MUID:88283628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     F;730-1115/Domain: intracellular *status predicted <INT> F;41-96,139-189,235-288,330-386,427-480/Disulfide bonds: *status predicted F;222,316,348,424,450,479/Binding site: carbohydrate (Asn) (covalent) *status predicted F;222,316,348,424,450,479/Binding site: carbohydrate (Asn) (covalent) *status predicted carbohydr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;519-596/Domain: fibronectin type III repeat homology <fN3A>F;625-685/Domain: fibronectin type III repeat homology <fN3B>F;712-729/Domain: transmembrane #status predicted <TMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F:20-711/Domain: extracellular #status predicted <EXT>F:34-98/Domain: immunoglobulin homology <IMM1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F;20-1115/Product: neural cell adhesion molecule, long domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper F;20-809,1077-1115/Product: neural cell adhesion molecule, short domain splice form *status exper experiment form *status exper experiment form *status experiment form *status experiment form *status experiment form *status exper experiment form *status exper experiment form *status exper experiment form *status exper experiment form *status e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: protein A; Residues: 20-36 < ROU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Reference number: A44290; MUID:86140120 A; Accession: A44290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Title: Structural and immunological characterization of the amino-terminal domain of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X07244; NID:g53321; PIDN:CAA30230.1; PID:g929720 R;Rougon, G.; Marshak, D.R. J. Biol. Chem. 261, 3396-3401, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 804-1081 <BA3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Accession: A28281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 642-1115 < BAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: S00384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Reference number: S00844; MUID: 88067687
             밁
                                                                                                                           γQ
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    F;262-272/Region:
F;323-388/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: EMBL:X07195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;420-482/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F; 228-290/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           F;161-165/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  F;152-156/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;132-191/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
             269 DSSEVTIRNVDKNDEAEYYCIAENKAGEQDASIHLKVFAKPKITYVENQTAMELEEQYTL
                                                                                                                                                                                                                                                                           222 NATANLGOSVTLVCDADG----
                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                              44 NYTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVV------LLSNTQ 95
                                                                                                                                         TQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISL 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S00844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCAM binding *status predicted immunoglobulin homology <IMM4> immunoglobulin homology <IMM5>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      heparin binding #status predicted
heparin binding #status predicted
immunoglobulin homology <IMM3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunoglobulin homology < IMM2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15.7%;
25.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45;
                                                                                                                                                                                                                                                                           ---FPEPTM-----SWTKDGEPIENEEEDERSRSSVS 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 283.5; DB 1; Pred. No. 7.3e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches 130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #status
             328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           homology; imm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                       C;Species: Gallus gallus (chicken)
C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 22-Jun-1999
C;Accession: A43613; B43613; A25435; B25435; A46550; S36950; A44369; A60852; S2966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                  R;Cunningham, B.A.; Hemperly, J.J.; Murray, B.A.; Science 236, 799-806, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
A; Reference number: A43613; MUID: 87206190
                                                             A; Title: Neural cell adhesion molecule: structure, immunoglobulin-like domains, ce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N; Contains: neural cell adhesion molecule, short domain form (NCAM-140)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N; Alternate names: NCAM-180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       neural cell adhesion molecule long domain form precursor - chicken
```

442 SNFSNIKIYSGPTSSSLEVNPDSENDFGNYNCTAINTIGHEFSEFIL 265 GK-KGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML 310

Prediger, E.A.; Brackenbury, R.;

211 VVRRVKVTVNYPPYISEAKGTGVPV-----GQKGTLQCEASAVPSAEFQWYKDDKRLIE 264 329 PIPSITWRTAVRNISSEATTLDGHIVVKEHIRMSALTLKDIQYTDAGEYFCIASNPIGVD

-MQAMYFEVQYAPKI----RG----PVVVYTWEGNPVNITCEVFAHPRAAVTWFRDGQLLPS

PEPTVTW----RHISPKAY---GFVSEDEYLEIQGITRE-----QSGDYECSASNDVAAP 210

```
neural cell adhesion molecule 1 - African clawed frog
N;Alternate names: N-CAM 1
C;Species: Xenopus laevis (African clawed frog)
C;Date: 19-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jul-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                  C;Comment: This protein mediates and regulates various cell-cell interactions thro C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Biochem. Biophys. Res. Commun. 245, 127-132, 1998
A;Title: Molecular cloning of ssd-form neural cell adhesion molecules (N-CAMs) as A;Reference number: JE0099; MUID:98204770
A;Accession: JE0099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                             Qy
                                                                                                                                                                                                                                           F;413-475/Domain: immunoglobulin homology <IMM>F;512-589/Domain: fibronectin type III repeat homology <3FR>
                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: DDBJ:AB008162; NID:g3116226; PIDN:BAA25931.1; PID:g3116227
A;Experimental source: heart
                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1-725 < KUD>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R; Kudo, M.; Takayama, E.; Tadakuma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Accession:
                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          445 LLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESLEFIL 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  329 TCEASGDPIPSITWRTSTRNISSEEQDLDGHMVVRSHARVSS---LTLKSIQYRDAGEYM 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        156 TCIATGRPEPTVTWR-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261 RLIEGK-KGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML 310
219 NATAKMAESVVLSCDADGFPDPEISWLKKGEPIEDGEEK-----ISFNEDQSEMTI 269
                                                   44 NVTVRQGESATLRCTIDN-RVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEI 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTASNTIGQD-SQSIDLEFQYAPKLQGPVAVYTWEGNQVNITCEVFAYPSATISWFRDGQ 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDK 260
                                                                                                          Similarity 27.9
80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JE0099
                                                                                                                                    15.5%;
                                                                                                             50;
                                                                                                                                 Score 279.5; DI
Pred. No. 8.3e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T.; Shiokawa,
127-132, 1998
                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---HISPKAYGFVSEDEYLEIQGITREQSGDYE 200
                                                                                                                                                                DB 2;
                                                                                                                                                             Length 725;
                                                                                                               Indels
                                                                                                             37;
                                                                                                             Gaps
                                                                                                               11;
```

predicted

```
A;Residues: 20-44.120-127;202-221;320-342;399-415;640-659;822-828 <CUNNA;Note: Asn-222 probably binds carbohydrate; Asn-226 probably does not R;Hemperly, J.J.; Murray, B.A.; Edelman, G.M.; Cunningham, B.A. Proc. Natl. Acad. Sci. U.S.A. 83, 3037-3041, 1986
A;Title: Sequence of a cDNA clone encoding the polysialic acid-rich and A;Reference number: A25435; MUID:86206089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Comment: Various forms of NCAM are produced by alternative splicing.

(;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immo C;Keywords: alternative splicing; brain; cell adhesion; duplication; heparin binding; s:

(;Keywords: alternative splicing; brain; cell adhesion; duplication; heparin binding; s:

(;Keywords: signal sequence #status predicted <SIG>
(;1-19/Domain: signal sequence #status predicted <SIG>
(;20-1091/Product: neural cell adhesion molecule, long domain form #status experimental f;20-809,1071-1091/Product: neural cell adhesion molecule, short domain form #status experimental f;20-809,1071-1091/Product: neural cell adhesion molecule, short domain form #status experimental figure for the first product for the f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Title: Identification of a peptide sequence involved in homophilic binding in the neu:
A;Reference number: A43280; MUID:92363934
A;Contents: annotation; homophilic binding region
C;Comment: NCAM mediates cell-cell adhesion via homophilic binding with another NCAM mo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Colwell, G.; Li, B.; Forrest, D.; Bracke
Genomics 14, 875-882, 1992
A;Title: Conserved regulatory elements in
A;Reference number: A44369; MUID:93122797
A;Accession: A44369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: GB:X04479
R;Sasner, M.; Covault, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Murray, B.A.; Owens, G.C.; Prediger, E.A.; Crossin, K.L.; Cunningham, B.A.; Edelman, J. Cell Biol. 103, 1431-1439, 1986
A;Title: Cell surface modulation of the neural cell adhesion molecule resulting from al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: mRNA
A; Residues: 128-1091 <HEM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: B43613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Cross-references: GB:M15860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-175 < CU2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Rao, Y.; Wu, X.F.; Gariepy, J.; Rutishauser, J. Cell Biol. 118, 937-949, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Experimental source: White Leghorn R;Cole, G.J.; Lowy, A.; C740, S., N.V.; Akeson, R.; Glaser, L. J. Cell Biol. 103, 1739-1740, S., M.;Title: Topographic localization of the heparin-binding domain A;Reference number: A60852; MUID:87057627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Reference number: S36950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     submitted to the EMBL Data Library, February 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 810-1070 < MUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Reference number: A46550; MUID:87033934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: B25435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: GB:M13210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: protein
                                                                                                                                                                                                                                                                                                                                                                                                                  F;34-98/Domain: in F;132-191/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Residues: 20
R; Rao, Y.; Wu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Reference number: A60852; A; Accession: A60852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-17 <COF>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Cross-references: R; Colwell, G.; Li, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-17 <SAS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: A46550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F; 20-711/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: EMBL:Z12128; NID:g63653; PIDN:CAA78113.1;
                                                                                                                                       F;419-481/Domain:
                                                                                                                                                                                        F; 322-387/Domain:
                                                                                                                                                                                                                               F;262-271/Region:
                                                                                                                                                                                                                                                                               F;228-289/Domain:
                                                                                                                                                                                                                                                                                                                      F; 161-165/Region:
                                                                                                                                                                                                                                                                                                                                                                           F;152-156/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          128-140;222-240;428-439;611-631;744-760;763-781;1080-1084 <HE2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S36950
                                                                                                                                                                                                                                                                                                                                                                                                                                                         : extracellular #status predicted <EXT>
immunoglobulin homology <IMM1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein
                                                                                                                                                                                                                                                                          heparin binding #status predicted
heparin binding #status predicted
immunoglobulin homology <IMM3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <COL>
                                                                                                                                       immunoglobulin homology <IMM4>
                                                                                                                                                                                                                                   NCAM binding #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                  immunoglobulin homology < IMM2>
                                           fibronectin type III repeat homology <FN3A> fibronectin type III repeat homology <FN3B>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL: X70342; NID: g417631; PIDN: CAA49807.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brackenbury,
predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              promoter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  U.; Siu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PID:g63654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PID:g417632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of the neural cell adher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the N-CAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytoplasmic doma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Edelman,
```

```
F;730-1091/Domain: intracellular #status predicted <INT> F;41-96,139-189,235-287,329-385,426-479/Disulfied bonds: #status predicted F;222/Binding site: carbohydrate (Asn) (covalent) #status experimental F;315,347,423,449,478/Binding site: carbohydrate (Asn) (covalent) #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Yajima, H.; Ohtsuka, H.; Kawamura, Y.; Kume, H.; Murayama, T.; Abe, H.; Kimura, E Biochem. Biophys. Res. Commun. 223, 160-164, 1996
A;Title: A 11.5-kb 5'-terminal cDNA sequence of chicken breast muscle connectin/tit A;Reference number: 222221; MUID:96254045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Date: 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 21-Jul-2000
C;Accession: T42633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          connectin/titin - chicken (fragment)
C; Species: Gallus gallus (chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Experimental source: breast muscle C; Keywords: skeletal muscle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
    g
                                                                                        DЪ
                                                                                                                                 80
                                                                                                                                                                                   B
                                                                                                                                                                                                                         Ω
                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Residues: 1-4162 <YAJ>
A; Cross-references: EMBL:D83390; NID:g1513029; PIDN:BAA11908.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: T42633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                    3747
                                                                                          3916
                                                                                                                                                                                                                                                                         3796 LQDSVAELELFDVQPLQSGDYTCQVSNEAGKISCTTHLFVKEPAKFVMKVNDLSVEKGKN 3855
                                                                                                                                                                                   3856 LILECTYTGTPPISVTWKKNGVILKHSEKCSITTTETSAILEIPNSKLEDQGQYSCHIEN
                                                                                                                                                                                                                              153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    214 VRARQSTM-----NATANLSQSVTLACDADG------FPEPTM-----TWTKDGEPIE 255
                                             265 GKKGYKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31 VRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVVL 90
                                                                                                                                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                                                                                                                                                                                 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISINEGNNISLTCIATGRPEPTVTW----RHISPKAV---GFVSEDEYLEIQGITREQ- 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LSNTQTQYSIE-----IQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KTAMELEDQITLTCEASGDPIPSITWKTSTRNISNEEKTLDGRIVVRSHARVSSLTLKEI
GTATVKMHFKNQVATLVFSQVDSDDSGEYICKVENTVGEATSSSLL
                                                                                                                                 DVAAPVVRRVKVTVNYPPY-ISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIE 264
                                                                                                                                                                                                                                                                                                                    TOYSI --- EIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNN
                                                                                                                                                                                                                                                                                                                                                                                                             TFPKAMDNVTVRQGESATLRCTI-DNRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQ 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VISWFRDGQLLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESSEFIL 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EFQWYKDDKRLIEGK-KGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QYTDAGEYYCTASNTIGQD-SQAMYLEVQYAPKLQGPVAYYTWEGNQVNITCEVFAYPSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QEDNEEKYSFNYDGSELIIKKVDKSDEAEYICIAENKAGEQDATIHLKVFAKPKITYVEN 315
                                                                                                                                                                                                                         ISLICIATGRPEPTVIW------RHISPKAVGFVSEDEYLEIQGITREQSGDYECSASN 205
                                                                                                                                                                                                                                                                                                                                                                    SFVKKPEPFNVLSGENITFTSIVKGSPPLEVKWFRGSIELAPGHK------CNIT
                                                                                        DSGQDNCHGA-ITILEPPYFVTPLEPVQVTVGDSASLQCQVAGTPEMIVSWYKGDTKL-R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSA 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15.5%;
26.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15.4%;
27.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 278.5; DB 2,
Pred. No. 9.2e-12;
""smatches 145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 279.5; DB 1
Pred. No. 1.4e-12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 4162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
    4019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PID:g1513030
                                                                                                                                                                                                                                                                                                                                                                                                                                                               25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                     3915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  310
                                                                                                                                                                                                                                                                                                                           152
                                                                                                                                                                                                                                                                                                                                                                         3795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7;
```

```
A;Residues: 355-364 <RBS>
A;Residues: 355-364 <RBS>
A;Cross-references: GB.M32611; NID:g205643; PIDN:AAA41679.1; PID:g205644
C;Comment: NCAM mediates cell-cell adhesion via homophilic binding with another NCAM
C;Comment: Various forms of NCAM are produced by alternative splicing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;20-858/Product: neural cell adhesion molecule, F;20-721/Domain: extracellular #status predicted F;34-98/Domain: immunoglobulin homology <INMI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; C;Keywords: alternative splicing; brain; cell adhesion; duplication; heparin binding F;1-19/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Small, S.J.; Akeson, R.
J. Cell Biol. 111, 2089-2096, 1990
A;Title: Expression of the unique NCAM VASE exon
A;Reference number: A37795; MUID:91035620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Cell Biol. 105, 2335-2345, 1987 A; Title: Identification of a cDNA clone that contains the complete coding sequence A; Reference number: S00846; MUID:88059265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 22-Jun-1999
C;Accession: S00846; B37795; I58136
     γΩ
                                                          В
                                                                                                           Qy
                                                                                                                                                                     Ъ
                                                                                                                                                                                                                         Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                          F;722-739/Domain: transmembrane #status predicted <TWM>
F;740-858/Domain: intracellular #status predicted <INT>
F;41-96,139-189,235-288,330-396,437-490/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Reference number: I58136; MUID:90166485 A; Accession: I58136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R; Small, S.J.; Haines, S.L.; Akeson, Neuron 1, 1007-1017, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 340-381 <SM2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-858 < SMA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    F;635-695/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F;529-606/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F;430-492/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F;323-398/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;263-272/Region: NCAM binding #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;228-290/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F;161-165/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           F;152-156/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F;132-191/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Gene: NCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Title: Polypeptide variation in an N-CAM extracellular immunoglobulin-like fold is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Status: preliminary; not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: B37795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Cross-references: EMBL: X06564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: S00846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R; Small, S.J.; Shull, G.E.; Santoni, M.J.; Akeson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N; Alternate names: NCAM-140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   neural cell adhesion molecule short domain form precursor -
                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                      316,348,434,460,489/Binding site: carbohydrate (Asn) (covalent) #status
        163
                                                            276
                                                                                                           103 QNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGR 162
                                                                                                                                                                                                                         44 NYTVRQGESATLRCTIDN-RYTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEI 102
                                                                                                                                                                                                                                                                                                                Local
        PEPTVTWR-
                                                       RNVDKNDEAEYVCIAENKAGEQDASIHLKVFAKPKITYVENQTAMELEEQVTLTCEASGD 335
                                                                                                                                                                     NATANLGQSVTLVCDADGFPEPTMSWTKDGEPIENEEE----DDEKHIFSDDSSE--LTI 275
                                                                                                                                                                                                                                                                                l Similarity
75; Conserv
                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       heparin binding *status predicted heparin binding *status predicted immunoglobulin homology <IMM3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fibronectin type III repeat homology <FN3A> fibronectin type III repeat homology <FN3B>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunoglobulin homology <IMM4>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunoglobulin homology <IMM2>
                                                                                                                                                                                                                                                                                                          15.4%;
25.5%;
                                                                                                                                                                                                                                                                                   50;
                                                                                                                                                                                                                                                                                                             Score 277.5; DB 1; Pred. No. 1.4e-12;
                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R.A.
  HISPKAVGFVSEDEYLEIQGITREQSG 197
                                                                                                                                                                                                                                                                                   132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <EXT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         short domain form #status predicted <M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            is independently regulated in distinct
                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                  Length 858;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rat
                                                                                                                                                                                                                                                                                   37;
                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                binding;
                                                                                                                                                                                                                                                                                7;
                                                                                                                                                                                                                                                                                                                                                                                                                      predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           imm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ПO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                τo
밁
                                              δÃ
                                                                                                           밁
                                                                                                                                                            Qy
                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                      Qy
```

Query Match Best Local :

Local Similarity

15.4%; 27.9%;

Score 277.5; Pred. No. 2e-

Matches

; 08

Conservative

49;

Mismatches 121; 2e-12; DB 1;

Indels 37;

Gaps

11;

389

211 VVRRVKVTVNYPPYISEAKGTGVPV-----GQKGTLQCEASAVPSAEFQWYKDDKRLIE 264

PIPSITWRTAVRNISSEATTLDGHIVVKEHIRMSALTLKDIQYTDAGEYFCIASNPIGVD PEPTVTW----RHISPKAV---GFVSEDEYLEIQGITRE----QSGDYECSASNDVAAP 210 HHVEKDDEAEYSCIANNQAGEAEATILLKVYAKPKITYVENKTAV-ELDEITLTCEASGD

-MQAMYFEVQYAPKI---RG---PVVVYTWEGNPVNITCEVFAHPRAAVTWFRDGQLLPS 441

270

219

NATANMAESYVLSCDADGFPDPEISWLKKGEPIEDGEEK----

----ISFNEDQSEMTI 269

103 QNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGR 162

44 NVTVRQGESATLRCTIDN-RVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEI 102

```
A;Residues: 1-1088 <KRI>
A;Cross-references: EMBL:M25696; NID:g214609; PIDN:AAA49909.1; PID:g214610
A;Note: the authors translated the codon AAA for residue 970 as Leu
C;Comment: NCAM mediates cell-cell adhesion via homophilic binding with another
C;Comment: Several forms of NCAM are produced by alternative splicing.
                                                                                                                             F;129-188/Domain: immunoglobulin homology <IMM2>
F;149-153/Region: heparin binding #status predicted
F;149-165/Region: heparin binding #status predicted
F;158-162/Region: heparin binding #status predicted
F;225-284/Domain: immunoglobulin homology <IMM3>
F;317-381/Domain: immunoglobulin homology <IMM4>
F;317-381/Domain: immunoglobulin homology <IMM4>
F;413-475/Domain: fibronectin type III repeat homology <FN3A>
F;512-589/Domain: fibronectin type III repeat homology <FN3A>
F;618-679/Domain: fibronectin type III repeat homology <FN3B>
F;706-723/Domain: transmembrane #status predicted <TMM>
F;706-723/Domain: intraoglobuling fibronectin type III repeat homology <FN3B>
F;706-723/Domain: transmembrane #status predicted <TMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              () NeyWorus: arternative presence #status predicted <SIG>
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-1088/Product: neural cell adhesion molecule, long domain form #status predict
F;20-1088/Product: neural cell adhesion molecule, short domain form #stat
F;724-1088/Domain: intracellular *status predicted <INT>
F;41-93,136-186,232-282,323-379,420-473/Disulfide bonds: *status predicted
F;219,310,341,417,443,472/Binding site: carbohydrate (Asn) (covalent) *status prec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            F;20-803,1050-1088/Product: neural cell adhesion molecule, short domain F;20-705/Domain: extracellular #status predicted <EXT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology C;Keywords: alternative splicing; brain; cell adhesion; duplication; heparin bindi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R; Krieg, P.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Date: 31-Mar-1993 #sequence_revision 31-Mar-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N;Contains: neural cell adhesion molecule, short domain form (NCAM-140) C;Species: Xenopus laevis (African clawed frog)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   neural cell adhesion molecule long domain form precursor - African clawed frog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F;34-95/Domain: immunoglobulin homology <IMMl>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Gene: NCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Reference number: S09600; MUID: 90098873
A; Accession: S09600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Title: Primary structure and developmental expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic Acids Res. 17, 10321-10335,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Accession: S09600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N; Alternate names:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258 DDKRLIEGK-KGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              336 PIPSITWRTSTRNISSEEKASWTRPEKQETLDGHMVVRSHARVSS---LTLKSIQYTDAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     452 DGQLLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESLEFIL 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               393 EYICTASNTIGQD-SQSMYLEVQYAPKLQGPVAVYTWEGNQVNITCEVFAYPSATISWFR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               198 DYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYK 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sakaguchi, D.S.; Kintner, C.R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCAM-180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #text_change 22-Jun-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of a large cytoplasmic don
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        392
```

- Qy В

Search completed: July 12, 2002, 00:36:19 Job time: 5682 sec

```
Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
             3333222222222111111111109876
3310387654321098765432109876543210987654321098765432109876543210987654321098765432109876543210987654321098765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1639.5
1477.5
          1305
11266
11259
9318.5
9318.5
9318.5
9318.5
9318.5
9318.5
9318.5
9318.5
9318.5
9318.5
2277.5
2277.5
2277.5
2277.5
2277.5
2277.5
2277.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2270.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
2070.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ī
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
Match
          29.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

20.0

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    July 12, 2002, 00:35:02; Search time 35.02 Seconds (without alignments) 380.341 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SwissProt_40:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     105224 seqs, 38719550 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-700-397-3
1806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MKTIQPKMHNSISWAIFTGL.....RRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length DB
          OPCM_RAT
LAMP_CHICK
LAMP_HUMAN
LAMP_HUMAN
LAMP_RAT
RILO_RAT
AMAL_DROWSE
NCA1_MOUSE
NCA1_CHICK
NCA1_RAT
NCA2_HUMAN
NCA1_HUMAN
NCA1_BOVIN
NCA1_HUMAN
CONT_CHICK
LACH_DROWSE
LACH_SCHAM
AXO1_CHICK
NCM2_HUMAN
CONT_RUMAN
CONT_RUMAN
CONT_RUMAN
CONT_MOUSE
PGBM_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NTRI_RAT
CEPU_CHICK
G55A_CHICK
OPCM_HUMAN
OPCM_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         105224
                                                        062718 rattus norv
090773 gallus gall
098892 gallus gall
014982 homo sapien
11834 bos taurus
12736 rattus norv
098919 gallus gall
013449 homo sapien
062813 rattus norv
092018 rattus norv
15364 drosophila
13595 mus musculu
13595 mus musculu
13595 rattus norv
16170 xenopus lae
13596 rattus norv
16170 xenopus lae
13591 homo sapien
13593 xenopus lae
14781 gallus gall
024372 drosophila
035136 mus musculu
026474 schistocerc
012860 homo sapien
012860 homo sapien
01398 rattus norv
12860 homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J.
rattus norv
homo sapien
```

227.5 12.6 1051 PTK7_CHICK 221.5 12.3 862 1 CD22_MOUSE 221 12.2 2012 1 DSCA_HIMAN 220.5 12.2 898 1 FAS2_SCHAM 215.5 11.9 1302 1 NRG_DROME 211.5 11.7 873 1 FS21_DROME 211.5 11.7 873 1 FS21_DROME 211.5 11.7 1070 1 PTK7_HUMAN 210.5 11.7 1461 1 NEO1_HIMAN 210.5 11.3 1377 1 NEO1_RAT 204.5 11.3 1377 1 NEO1_CHICK	12.3 862 1 12.2 2012 1 12.2 2012 1 12.2 898 1 11.7 873 1 11.7 1070 11.7 1461 1 11.3 1374 1 11.3 1374 1 11.3 1374 1 11.3 1374 1 11.3 1374 1 1	4.5
1051 1 862 1 2012 1 1302 1 1302 1 1407 1 1461 1 1377 1 1443 1	1051 1 PTK7_CHICK Q91048 862 1 CD2Z_MOUSE P35329 2012 1 DSCA_HUMAN 060469 2012 1 DSCA_HUMAN P22648 1302 1 NRG_DROME P30481 1302 1 NRG_DROME P30481 1302 1 FS2Z_DROME P30481 873 1 FS2Z_DROME P34082 1070 1 PTK7_HUMAN Q92859 1070 1 NEOL_HUMAN Q15746 1377 1 NEOL_RAT P97603 13443 1 NEOL_CHICK Q90610	204
	1 PK7_CHICK Q91048 1 CD2Z_MOUSE P35529 1 DSCA_HUMAN P22648 1 LNG_DROME P2048 1 NRG_DROME P30483 1 RF2Z_DROME P34083 1 FS2Z_DROME P34083 1 FS2Z_DROME P34082 1 PTK7_HUMAN Q92859 1 KMLS_HUMAN Q15746 1 NEOL_RAT P97603 1 NEOL_CRAT Q90610	11.3
1 PYKY_CHICK 1 CD22_MOUSE 1 DSCA_HUMAN 1 FAS2_SCHAM 1 NRG_DROME 1 FS22_DROME 1 FS21_DROME 1 FS21_DROME 1 FS21_DROME 1 FFX7_HUMAN 1 NEO1_HUMAN 1 NEO1_HUMAN 1 NEO1_RAT 1 NEO1_CHICK	Q91046 P53529 066469 P22641 P20241 P30024 P34083 P34083 Q15746 Q15766 Q15766 Q96610	1443
PTKY_CHICK CD22_MOUSE DSCA_HUMAN FAS2_SCHAM NRG_DROME FS21_DROME FS21_DROME FFS11_DROME PTKY_HUMAN NEO1_HUMAN NEO1_HUMAN NEO1_RAT NEO1_CHICK	Q91046 P53529 066469 P226469 P20241 P300241 P34083 P34083 Q15746 Q15766 Q97605 Q97605	
		NEO1_CHICK

ALIGNMENTS

	88888888	* # 888888888888888888888888888888888888	RA RA RA	RESULT NTRI_R NTRI_R NTRI_R NTRI NTRI NTRI NTRI NTRI NTRI NTRI NTR
EMBL; U1684 InterPro; I InterPro; I InterPro; I InterPro; I InterPro; I Pfam; PF000 SMART; SM00 SMART; SM00 SMART; SM00 SMART; SM0 DOMAIN DOMAIN DOMAIN	This SWISS-PROT entry between the Swiss I the European Bioinfo use by non-profit modified and this stentities requires a or send an email to	J. Neurosci. 1 -!- FUNCTION: -!- SUBCELLULA: -!- TISSUE SPE -!- DEVELO'MEN DEVELO'MEN DEVELO'MEN DEVELO'MEN THE HINDER FONTIRE NU THE HINDER SUBLARITY -!- SUMILARITY -!- SUMILARITY	SEQUENCE FROM N.A., STRAIN=SPRAGUE-DAWLE MEDLINE=95198094; PU Struyk A.F., Canoll Salzer J.L.; "Cloning of neurotri	
5; AAA674 pR003006; pR003598; pR003500; pR003598; pR003500; 147; 19; 3 447; 19; 3 4410; IGC2 11111 domai 1111 domai 1111 3 32 32 33 32 33 32 33 32 33 32 33 33 33	This SWISS-PROT entry is colbetween the Swiss Institute the European Bioinformatics use by non-profit institute oddified and this statement entities requires a license or send an email to license	· · ACA TORES	SEQUENCE FROM N.A., AND SEQUENCE STRAINE-SPRAGUE-DAWLEY; MEDLINE-95198094; PubMed=7891157; Struyk A.F., Canoll P.D., Wolfgan Salzer J.L.; "Cloning of neurotrimin defines a	ANDAF
1; -, J_C2. J_C2. J_11ke J_1 S; 1. Cell	cop tute ics ics tit tit ent ent nse nse	Cell adnesion molecules."; 2141-2156(1995). URAL CELL ADHESION MOLECULE. LOCATION: Attached to the membr. FICITY: CENTRAL NERVOUS SYSTEM. L STAGE: EXPRESSED AT HIGH LEVE. ROJECTION SYSTEMS: IN NEURONS OD LOWER CORTICAL LAMINAE IN THE EUS, CEREBELLAR GRANULE CELLS, N. BELONGS TO THE IMMUNOGLOBULIN SI CONTAINS 3 IMMUNOGLOBULIN-LIKE (M N.A., AND SEQUENCE OUB-DAWLEY; 8094; PubMed=7891157; Canoll P.D., Wolfgang	5 8.7
adhesion; Glycoprotein; POTENTIAL. NEUROTRIMIN. REMOVED 1- MATURE FORM IG-LIKE C2-TYPE DOMAIN IG-LIKE C2-TYPE DOMAIN IG-LIKE C2-TYPE DOMAIN	yyright. It is proceed to the process of Bioinformatics institute. There aritions as long as is not removed. (See htigisb-sib.ch).	IN THE IMMUNOGLOGULIN - LATHER IMMUNOGLOGULIN - LATHER IMMUNOGLOGULE. I ATTACHED TO THE MEMBERAL BY A GPI-AN CENTRAL NERVOUS SYSTEM. EXPRESSED AT HIGH LEWELS IN SEVERAL EXPIESSED AT HIGH LEWELS IN SEVERAL AND CORTICAL LAMINAE IN THE FOREBRALN AND CORTICAL LAMINAE CELLS, AND PURKINJE CEBELLAR GRANULE CELLS, AND PURKINJE CE TO THE IMMUNOGLOBULIN SUPERFAMILY. IGLIO THE IMMUNOGLOBULIN SUPERFAMILY. IGLIO THE IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS	F 217-2 M.J., new_sub	PRT; 344 AA. sequence update) annotation update) 5). a; Craniata; Vertebrata; a; Sciurognathi; Muridae;
	oduced through cs and the E e are no rest: s its content Usage by an ttp://www.isb:	JLE. JLE. JLE. JLE. JLE. JENETAL JENETAL	Off.	brata; uridae;
e n EN	produced through a collaboration ics and the EMBL outstation on its are no restrictions on it is its content is in no wate a Usage by and for commercia http://www.isb-sib.ch/announce	I-anch AL MUS, AND IN E CELL IGLON AINS.	., D'Eustachio P	Euteleostomi; Murinae; Rattus
	llaboration utstation - ons on its in no way commercial n/announce/	or. THE	;	:08.

```
RESULT 2
CEPU_CHICK
      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                 01-MAR-2002 (Rel. CEPU-1 protein
                                                                                                                                                                                                                                                                                             Q90773;
01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
CARBOHYD
                                                                          "CEPU-1, a novel immunoglobulin superfamily molecule, developing corebellar Purkinje cells.";
J. Neurosci. 16:1770-1779(1996).
-i- EUNCTION: IT MAY BE A CELLULAR ADDRESS MOLECULE SE PURKINJE CELLS. IT MAY REPRESENT A RECEPTOR OR A (
                                                                                                                                          Spaltmann F., Bruemmendorf T
                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                               Archosauria; Aves; Neognathae;
                                                                                                                                                                                                                                              Eukaryota; Metazoa;
                                                                                                                                                                                                                                                        CEPU-1 protein precursor. Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                   CEPU_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
                                                                                                                                                       MEDLINE=96370549; PubMed=8774445;
                                                                                                                                                                     TISSUE=Brain;
                                                                                                                                                                                                       NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LIPID
                                                                                                                                                                                                                                                                                                                                                                                                 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                 249
                                                                                                                                                                                                                                                                                                                                                                                                                        309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  [SULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12 ISWAIFTGLAALCLF----QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
SUBCELLULAR LOCATION: Attached to the membrane by a GPH-anchor. ALTERNATIVE PRODUCTS: 2 ISOFORMS; A MAJOR FORM AND A MINOR FORM (SHOWN HERE); ARE PRODUCED BY ALTERNATIVE SPLICING.

TISSUE SPECIFICITY: FOUND ON THE DENDRITES, SOMATA AND AXONS OF DEVELOPING PURKINJE CELLS. UNDETECTABLE ON OTHER NEURONS LIKE
                                                                  RECEPTOR COMPLEX.
                                                                                                                                                                                                                                                                                                                                                                                               MLFGPGAVSEVNNGTSRRAGCIWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                       MLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                             PSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QGITREQSGEYECSASNDVAAPVVRRVNVTVNYPPYISEAKGTGVPVGQKGTLQČEASAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                PSAEFQWFKDDKRLVEGKKGVKVENRPFLSRLTFFNVSEHDYGNYTCVASNKLGHTNASI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA;
                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                 35, Last sequence update)
41, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1115
295
295
70
70
152
216
284
284
305
305
                                                                                                                                                                                                                                             Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90.8%;
92.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               37998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; WM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1639.5; DB 1;
Pred. No. 4.7e-125;
Pred. No. 4.7e-125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-LINKED (G
N-LINKED (G
N-LINKED (G
N-LINKED (G
N-LINKED (G
N-LINKED (G
GPI-ANCHOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                              Galliformes; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CBB39BE53B33B224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GICNAC...)
                                                                                                                                                                                                                                                                                                                                   353
                                                                                                                                                                                                                                                                                update)
                                                                                                                                                                                                                                                                                                                                   AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                           A SUBUNIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (POTENTIAL).
                                                                                                                            is expressed
                                                                                                                                                                                                                               Phasianinae;
                                                                             of To
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                             ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                248
                                                                                                                            bу
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۲.
```

Query Match

DВ

Length

353;

```
DOMAIN
DISULFID
 VARSPLIC
SEQUENCE
                                           CARBOHYD
CARBOHYD
                                                                                                                                                                  CHAIN
PROPEP
                                                                                                                                                                                                           SMART; SM00410; TG_like; 1.
SMART; SM00408; TGc2; 2.
Immunoglobulin domain; Cell adhesion; Glycoprotein;
                                                                                                                                              DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -
                     LIPID
                                                                             CARBOHYD
                                                                                                  DISULFID
                                                                                                             DISULFID
                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                           Pfam; PF00047; ig;
                                                                                                                                                                                                                                                                                                                      entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                use by non-profit institutions as long a modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                            the European Bioinformatics Institute. The use by non-profit institutions as long
                                  CARBOHYD
                                                                 CARBOHYD
                                                                                       CARBOHYD
                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                        InterPro;
                                                                                                                                                                                                                                                                 InterPro;
                                                                                                                                                                                                                                                                              InterPro;
                                                                                                                                                                                                                                                                                        EMBL; 272497; CAA96578.1; -.
                                                                                                                                                                                                                                                                                                             or send an
                                                                                                                                                                                                                                                                                                                                                                                               GOLGI OR GRANULE CELLS.

DEVELOPMENTAL STAGE: EXPRESSED BY DEVELOPING CEREBELLAR PURKINJE CELLS. EXPRESSEN COINCIDES WITH THE GROWTH OF THE DENDRITIC TREE, AFTER PURKINJE CELLS HAVE FINISHED THEIR MIGRATION FROM THE VENTRICULAR ZONE (FROM E15 UNTIL E21). EXPRESSED IN THE ADULT. SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY. IGLON SUBFAMILY. SIMILARITY: CONTAINS 3 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                 SWISS-PROT entry is copyright. It is produced through a sen the Swiss Institute of Bioinformatics and the EMBI
                                                                                                                                                                                                   Signal;
                                                                                                                                                                                                                                                      IPR003600; Ig_like
                                                                                                                                                                                                                                                                IPR003006; Ig_MHC. IPR003598; Ig_c2.
                                                                                                                                                                                                                                                                                                            email to license@isb-sib.ch).
           331
48
148
155
234
234
155
241
241
282
290
310
310
                                                                                                                                                                                                   Alternative
                     38736
 , WM
                   POTENTIAL.

POTENTIAL.

N-LINKED (GLCNAC...)

N-LINKED (GLCNAC...)

N-LINKED (GLCNAC...)

N-LINKED (GLCNAC...)

N-LINKED (GLCNAC...)

N-LINKED (GLCNAC...)

N-LINKED (GLCNAC...)
                                                                                                                     REMOVED IN MATURE FORM (
IG-LIKE C2-TYPE DOMAIN I
IG-LIKE C2-TYPE DOMAIN 2
IG-LIKE C2-TYPE DOMAIN 3
POTENTIAL.
                                                                                                                                                                                                   splicing
MISSING (IN MAJOR ISOFORM). 2550C48591EBBBA6 CRC64;
                                                                                                                                                                             CEPU-1 PROTEIN
                                                                                                                                                                                          POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                       There are no restrictions
                                                                                                                                                                                                                                                                                                                                            as its content
                                                                                                                                                                                                                                                                                                                                  Usage
                                                               (POTENTIAL).
(POTENTIAL).
                                (POTENTIAL)
                                           (POTENTIAL)
                                                                                                                                                                                                             GPI-anchor;
                                                                                                                                                                                                                                                                                                                                   Уď
                                                                                                                                                                                                                                                                                                                                   and for
                                                                                                                                                                                                                                                                                                                                                                  EMBL outstation
                                                                                                                                                                                                                                                                                                                                                                             collaboration
                                                                                                                                                                                                                                                                                                                                              in
                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                              no
                                                                                                                                                                                                                                                                                                                                              way
```

```
밁
                               Ş
                                                               В
                                                                                             Qy
                                                                                                                               밁
                                                                                                                                                         Qy
                                                                                                                                                                                              밁
                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                               183
   303
                                                                                                                                                                                              123
                                 305
                                                               243
                                                                                               245
                                                                                                                                                             185
                                                                                                                                                                                                                            125
                                                                                                                                                                                                                                                            63
                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
mes 276; Conser
                                                                                                                                                                                                                                                                                                                                                           Ŋ
                                                                              ASAVPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHT
                                                                                                                                            YLEIQGITREQSGDYECSASNDVAAPVVRRVKYTVNYPPYISEAKGTGVPVGQKGTLQCE
                                                                                                                                                                                                           TSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDE
                                                                                                                                                                                                                                                                           RVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPK 124
NASMILYEETTTALTPWKGPGAVHDGNSGAWRRGSCAWLLALPLAQLARQF
                              NASIMLE ------GPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                             ASAVPSADFQWYKDDKRLAEGQKGLKVENKAFFSRLTFFNVSEQDYGNYTCVASNQLGNT
                                                                                                                           YLEITGITREQSGEYECSASNDVAAPVVQRVKVTVNYPPYISDAKSTGVPVGQKGILMCE
                                                                                                                                                                                           TSRVHLIVQVSPKITETSSDISINEGGNVSLTCIATGRPDPTITWRHISPKAVGFISEDE
                                                                                                                                                                                                                                                          RVAWLNRSSILYAGNDKWCLDPRVVLLANTKTQYSIQIHDVDDVYDEGPYTCSVQTDNHPK 122
                                                                                                                                                                                                                                                                                                                          QAKMQHPVSWVIFAGMAALLLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCSVDNRVT 62
                                                                                                                                                                                                                                                                                                                                                        QPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVT 64
                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                     81.8%;
78.6%;
                                                                                                                                                                                                                                                                                                                                                                                         32;
                                                                                                                                                                                                                                                                                                                                                                                                        Score 1477.5;
Pred. No. 5.7
                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                        .7e-112;
                                                                                                                                                                                                                                                                                                                                                                                         Indels
                               344
                                                                                                                                                                                                                                                                                                                                                                                         11;
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                             304
                                                                                                                                                         244
                                                                                                                                                                                                                          184
                                                               302
                                                                                                                                                                                            182
                                                                                                                                                                                                                                                                                                                                                                                         1;
```

```
RESULT 3
                                   CARBOHYD
CARBOHYD
                                                                  DOMAIN
DISULFID
DISULFID
CARBOHYD
                                                                                                                                     PROPEP
DOMAIN
DOMAIN
                                                                                                                                                                                                        Repeat;
                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wilson D.J.A., Kim D.-S., Clarke G.A., Marshall-Clarke S., Moss D.J., "A family of glycoproteins (GP55), which inhibit neurite outgrowth, are members of the Ig superfamily and are related to OBCAM, neurotrimin, LAMP and CEPU-I.", J. Cell Sci. 109:3129-3138(1996).
-i- FUNCTION: INHIBITS NEURITE OUTGROWTH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lodge A.P., Kim D.-S., Howard M.R., McNamee C.J., Smith N., "Cloning of CEPU-s, a secreted isoform of CEPU-1, and OBCAM chick: structural diversity of IgLON family proteins.", Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1997 (Rel. 35, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
16-0CT-2001 (Rel. 40, Last annotation update)
Neurite inhibitor GP5-A precursor (OBCAM protein gamma
                                                                                                                                                                                                                                                       SMART; SM00410; IG_like; 1.
SMART; SM00408; IGc2; 2.
                                                                                                                                                                                                                                                                                     Pfam; PF00047; ig; 4.
                                                                                                                                                                                                                                                                                                   InterPro; IPR003006; Ig_MHC.
InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like.
                                                                                                                                                                                                                                                                                                                                                          EMBL; Y08170; CAB41420.1;
                                                                                                                                                                                                                                                                                                                                                                                      entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -i: SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
-i: TISSUE SPECIFICITY: RESTRICTED TO THE NERVOUS SYSTEM.
-i: DEVELOPMENTAL STAGE: INCREASES DURING DEVELOPMENT FROM VERY LOW
LEVELS AT EMERYONIC DAY 10 AND IS MOST ABUNDANT AFTER HATCHING.
-i: SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY. IGLON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gallus gallus (Chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G55A_CHICK
                                                                                                                                                                                                                                  SMART; SM00408; IGc2; 2.
Immunoglobulin domain; Cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=97157768; PubMed=9004047;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 64-337 FROM N.A., AND PARTIAL SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SSUE=Brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY: CONTAINS 3 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS
                                                                                                                                                                                                                    Signal
   ₩;
POTENTIAL.

N-LINKED (GLCNAC...) (PO'
                                                                                                                REMOVED IN MATURE FORM (POIGE-LIKE C2-TYPE DOMAIN 2. IG-LIKE C2-TYPE DOMAIN 3.
                                                                                                                                                                                                                                    adhesion; Glycoprotein; GPI-anchor;
                                                                                                     POTENTIAL.
                                                                                                                                                                                                      SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA
               (POTENTIAL)
                                               (POTENTIAL).
                                                                                                                                                                     (POTENTIAL).
                                                                                                                                                                                 (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      isoform).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Moss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D.J.;
```

Query Match

Score 1305;

DВ ۳.

Length 337;

InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like
Pfam; PF00047; ig; 3.

MIM; 600632;

InterPro; IPR003006;

Ig_MHC.

```
RESULT 4
OPCM_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 248; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPCM_HUMAN
Q14982;
                                                                                                                                                                                                                                                                                                                                                                                                 "Cloning, sequencing and localization to chromosome 11 encoding a human opioid-binding cell adhesion molecule Gene 155:213-217(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Opioid binding protein/cell adhesion molecule precursor
(Opioid-binding cell adhesion molecule) (OPCML).
OPCML OR OBCAM.
                                                                                                                                              use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                            INVOLVED IN CELL CONTACT.
-!- SUBCELLULAR LOCATION: Attached
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shark K.B., Lee N.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=Occipital cortex;
MEDLINE=95237612; PubMed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                     or send an
                                                                                                                                                                                                                                                                        -!- SIMILARITY: CONTAINS 3 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS.
                                                                                                                                                                                                                                                                                                           similarity).
-!- SIMILARITY: BELONGS TO THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                               -!- FUNCTION: BINDS OPIOIDS IN THE PRESENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IILYGPGAVHDSGNAASRAAAGLCLW--ATLLARLLLDF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASA 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VHLIVQVPPQIVNISSDITVNEGSSVTLMCLAFGRPEPTVTWRHLSGKGQGFVSEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSR 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMLEGPGAVSEVSNGTSRRAG--CVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VPVAEFQWFKEDTRLANGLEGVRIESKGRLSTLTFFNVSEKDYGNYTCVATNKLGNTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MYHPACWIVFTATTALLFIPGVPVRSGDATFPKAMDNVTVRQGESATLRCTVDDRVRRVA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ITGITREQSGEYECSAVNDVAVPDVRKVKVTVNYPPYISNAKNTGASVGQKGILQCEASA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLE 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WINRSTILYAGNDKWSIDNRVVILSNTKTQYSIKIHNVDVYDEGPYTCSVQTDNHPKTSR 120
                                                                                                                                   email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Human).
                                                                                                AAA36387.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PubMed=7721093;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 4.4e-98;
                                                                                                                                                                                                                                                                                                             IMMUNOGLOBULIN SUPERFAMILY. IGLON
                                                                                                                                                                                                                                                                                                                                                ç
                                                                                                                                                                                                                                                                                                                                                the membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA
                                                                                                                                                                                                                                                                                                                                                                                ACIDIC LIPIDS; PROBABLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                            by a GPI-anchor (By
                                                                                                                                                                                                                                                                                                                                                                                                                 of a cDNA (OBCAM).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
```

```
OPCM_BOVIN
ID OPCM_BA
AC P11834
DT 01-OCT
DT 01-OCT
DT 16-OCT
DE Opioid
GN OPCML
GN OPCML
OCS
BOS tas
OC EDWARY
OC EDWARY
OC Mammal
OC BOVIda
OC BOVIda
OC NCBI_T
RN [1]
RP SEQUEN
RA SCHOFI
RA ChO T.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                    Ъ
                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                            QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
TISSUE-Brain;
MEDLINE-89251576; PubMed=2721489;
Schofield P.R., McFarland K.C., Hayflick J.S.,
Scho T.M., Roy S., Lee N.M., Loh H.H., Seeburg P
                                                                                                                                      01-OCT-1989 (Rel. 12, Created)
01-OCT-1989 (Rel. 12, Last sequence update)
16-OCT-2001 (Rel. 42, Last annotation update)
Opioid binding protein/cell adhesion molecule precursor
(Opioid-binding cell adhesion molecule) (OPCML).
OPCML OR OBCAM OR OCAM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID CARBOHYD
                                                                                                                                                                                                   P11834;
01-OCT-1989
                                                                                                               Eukaryota;
                                                                                                                                                                                                                           OPCM_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LIPID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOMAIN
                                                   SEQUENCE FROM N.A., AND PARTIAL SEQUENCE
                                                                           NCBI_TaxID=9913;
                                                                                         Bovidae; Bovinae;
                                                                                                                            Bos taurus (Bovine).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Repeat; Signal SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMART;
                                                                                                    Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immunoglobulin domain;
                                                                                                                                                                                                                                                                                       309
                                                                                                                                                                                                                                                                                                                308
                                                                                                                                                                                                                                                                                                                                      249
                                                                                                                                                                                                                                                                                                                                                              248
                                                                                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                                                                                     189
                                                                                                                                                                                                                                                                                                                                                                                                                                      129
                                                                                                                                                                                                                                                                                                                                                                                                                                                              129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12 ISWAIFTGLAALCLF----QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                       ITLYGPGAVIDGVNSASRALACLWLSGTLLAHFFIKF
                                                                                                                                                                                                                                                                                                            IMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LNRSTILYAGNDKWCLDPRVVLLSNIQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDDRVTRVAW 68
                                                                                                                                                                                                                                                                                                                                    VPMAEFQWFKEETRLATGLDGMRIENKGRMSTLTFFNVSEKDYGNYTCVATNKLGNTNAS
                                                                                                                                                                                                                                                                                                                                                           VPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNAS 307
                                                                                                                                                                                                                                                                                                                                                                                   LNRSTILYAGNDKWSIDPRVIILYNTPTQYSIMIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                           IQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASA 247
                                                                                                                                                                                                                                                                                                                                                                                                                                     HLIVQVPPQIMNISSDITVNEGSSVTLLCLAIGRPEPTVTWRHLSVKEGQGFVSEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPK-AVGFVSEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      al Similarity
240; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SM00408;
                                                                                                  ; Metazoa; Chordata; Craniata; Vertebrata; Eutheria; Cetartiodactyla; Ruminantia; Peo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           323
50
150
237
237
157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; IGc2; 2.
                                                                                                                                                                                                                           STANDARD;
                                                                                        Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140
285
293
306
322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122
209
303
115
202
296
44
70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                70.2%;
71.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE.

REMOVED IN MATURI

IG-LIKE C2-TYPE I

IG-LIKE C2-TYPE I

IG-LIKE C2-TYPE I

POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1268; DB 1;
Pred. No. 4.4e-95;
7; Mismatches 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    adhesion; Glycoprotein; GPI-anchor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GPI-ANCHOR (POTENT E7AD17BEA1AA3FF4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPIOID
                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BINDING
                                                                                                                                                                                                                           345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IN MATURE FORM
     Seeburg P.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GLCNAC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (POTENTIAL).
Alaa3ff4 CRC64;
                                                                                                                                                                                                                          ΑA
                                                                                                                                                                                                                                                                                                             344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DOMAIN
DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROTEIN/CELL ADHESION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56;
               Wilcox J.N.,
                                                                                                  Pecora;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                                               Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ω Ν :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             345;
                                                                                                    Bovoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                                                                                   248
                                                                                                                                                                                                                                                                                                                                                                                                                                     188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ν.
```

밁 δÃ Вþ ΩV Дb δÃ B Qγ В Q

251 250 191

MAEFQWFKEDTRLATGLDGMRIENKGHISTLTFFNVSEKDYGNYTCVATNKLGITNASIT SAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIM GITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVP

249 190

250

IVQVPPQIMNISSDVTVNEGSSYTLLCLAIGRPEPTVTWRHLSVKEGQGFVSEDEYLEIS IVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPK-AVGFVSEDEYLEIQ 189

DIKRDQSGEYECSALNDVAAPDVRKVKITVNYPPYISKAKNTGVSVGQKGILSCEASAVP

131 131 71 Matches

240;

Conservative

34.

57;

Indels

4. Gaps

2;

11

71

14 WAIFTGLAALCLF---QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLN 70

WKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDDRVTRVAWLN

70

RSTILYAGNDKWSIDPRVIILVNTPTQYSIMIQNVDVYDEGPYTCSVQTDNHPKTSRVHL RSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHL 130

130

```
Query Match
Best Local
                                                                                                                                                        DISULFID
                                                                                                                                                                                                        DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and recommercial
                                                          LIPID
SEQUENCE
                                                                                                                                                                                                                                                                   Repeat;
                                                                                                                                                                                                                                                                                                   Pfam; PF00047; ig; 3.
SMART; SM00410; IG_like; 1.
SMART; SM00408; IGC2; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                 CARBOHYD
                                                                                               CARBOHYD
                                                                                                          CARBOHYD
                                                                                                                      CARBOHYD
                                                                                                                                CARBOHYD
                                                                                                                                              CARBOHYD
                                                                                                                                                                                DISULFID
                                                                                                                                                                                              DOMAIN
                                                                                                                                                                                                                                PROPEP
                                                                                                                                                                                                                                                         CHAIN
                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR003598;
                                                                                                                                                                                                                                                                                                                                                                            HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; X12672; CAA31192.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein with potential roles in EMBO J. 8:489-495(1989).
                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR003006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- SIMILARITY: CONTAINS 3 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Molecular characterization of a new immunoglobulin superfamily
protein with potential roles in opioid binding and cell contact.";
                                                                                                                                                                                                                                                                                        [mmunoglobulin domain;
                                                                                                                                                                                                                                                                                                                                        InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               similarity).
SIMILARITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FUNCTION: BINDS OPIOIDS IN THE PRESENCE OF INVOLVED IN CELL CONTACT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBCELLULAR LOCATION: Attached
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBFAMILY
                                                                                                                                                                                                                                                                                                                                                                                      S03199; S03199.
                                                                                                                                                                                                                                                                                                                                                                            P01732;
                                                                                                                                                                                                                                                                             Signal
             Similarity
                                                                                                                                                                                                                                                                                                                                        IPR003600;
                                                       322
345
                                                                                 323
50
150
237
237
157
244
44
70
140
285
293
                                                            AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY. IGLON
                                                                                                                                                                                                                                                     27
322
                                                                                                                                                                                                                                                                                                                                     ; Ig_MHC.
; Ig_c2.
; Ig_like.
                                                         37914
            70.18;
71.68;
                                                                                                                                                                                                                                                                                          Cell
                                                          WW;
                                                                                                                                                                              REMOVED IN MATURE FORM (
IG-LIKE C2-TYPE DOMAIN 1
IG-LIKE C2-TYPE DOMAIN 2
IG-LIKE C2-TYPE DOMAIN 3
POTENTIAL.
                                                                                                                                                                                                                                                                                        adhesion; Glycoprotein;
                                                                                N-LINKED
N-LINKED
N-LINKED
            Pred.
                       Score 1266;
                                                                      GPI-ANCHOR
                                                       N-LINKED (GLCNAC...) (
GPI-ANCHOR (POTENTIAL).
DIECC8D9E7D8CB19 CRC64
                                                                                                                                            N-LINKED
                                                                                                                                                        POTENTIAL.
                                                                                                                                                                    POTENTIAL
ed. No. 6.3e-95,
Mismatches 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ç
                                                                                                                                                                                                                                                      BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the
                         DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     membrane by a GPI-anchor (By
                                                                                                                                                                                                                                                      PROTEIN/CELL ADHESION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACIDIC LIPIDS; PROBABLY
                                                          CRC64;
                     Length
                                                                                                       (PROBABLE).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                 (POTENTIAL)
                                                                                             (POTENTIAL)
                                                                                                                                                                                                                                (POTENTIAL)
                                                                                                                                                                                                                                                                                          GPI-anchor;
```

```
RESULT
OPCM_RAT
    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPCM_RAT STANDARD; PRT; 345 AA. p32736; Q01654; P32735; Q01653; Q01653; Q01659; PRT-1993 (Rel. 26, Created) Q1-UL-1993 (Rel. 33, Last sequence update) 16-OCT-2001 (Rel. 40, Last annotation update) Q01614 binding protein/cell adhesion molecule precursor Opioid binding protein/cell adhesion molecule precursor
                                                                                                                                                                                                                                           EMBL;
 DOMAIN
DOMAIN
DOMAIN
DISULFID
                                                                                                                           InterPro; IPR003600; Ig_like.
Pfam; PF00047; ig; 3.
SMARR; SM04410; IG_like; 1.
SMARR; SM00408; IGC2; 2.
Immunoglobulin domain; Cell adhesion; Glycoprotein;
                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entrepean Bioinformatics Institute. There are no restuse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and
                                                                                                                                                                                                                                                                                                      entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       expressed neural cell adhesion molecules."; J. Neurosci. 15:2141-2156(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Struyk A.F., Canoll P.D., Wolfgang Salzer J.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                PIR; JC1239; JC1239.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SUBCELLULAR LOCATION: Attached to the membrane
-!- ALTERNATIVE PRODUCTS: AT LEAST 2 ISOFORMS; 1 (:
MAY BE PRODUCED BY ALTERNATIVE SPLICING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 195-214, AND GPI-ANCHOR. MEDLINE-95198094; PubMed-7891157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene 117:249-254(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=92347701; PubMed=1339369; Lippman D.A., Lee N.M., Loh H.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPCML OR OBCAM
                                                       PROPEP
                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                   InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Cloning of neurotrimin defines a new subfamily of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Opioid-binding cell adhesion molecule rat brain cDNA library.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Opioid-binding cell adhesion molecule) (OPCML).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       310 LFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               σ
                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY: CONTAINS 3 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FUNCTION: BINDS OPIOIDS IN THE PRESENCE OF INVOLVED IN CELL CONTACT.
                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LYGPGAVIDGVNSASRALACLWLSGTLFAHFFIKF
                                                                                                                                                                                                                                           M88710; AAA40859.1; -. M88711; AAA40860.1; -. M88709; AAA40858.1; -.
                                                                                                                 S
                                                                                                                 ignal;
                                                                                                                                                                                                  IPR003006; Ig_MHC. IPR003598; Ig_c2.
   323
50
150
237
237
                                                                                                                 Alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    BELONGS
   345
122
209
303
115
                                                                                    27
322
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TO THE
                                                                                 BY SIMILARITY.
OPIOID BINDING
MOLECULE.

REMOVED IN MATURE FORM (POTENTIAL).

IG-LIKE C2-TYPE DOMAIN 1.

IG-LIKE C2-TYPE DOMAIN 2.

IG-LIKE C2-TYPE DOMAIN 3.

POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  IMMUNOGLOBULIN SUPERFAMILY. IGLON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             м.д.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (OBCAM)-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         344
                                                                                    PROTEIN/CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rane by a GPI-anchor
1 (SHOWN HERE) AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACIDIC LIPIDS; PROBABLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  differentially
                                                                                                                              GPI-anchor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                D'Eustachio
                                                                                                                                                                                                                                                                                                                                                           restrictions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      clones from
                                                                                                                                                                                                                                                                                                                                    and for commercia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GPI-anchor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (OBCAM)
                                                                                    ADHESION
                                                                                                                                                                                                                                                                                                                                                                           EMBL outstation
                                                                                                                                                                                                                                                                                                                                                  s.
                                                                                                                                                                                                                                                                                                                                                                                         a collaboration
                                                                                                                                                                                                                                                                                                                                                  'n
```

```
OS THE FIRE 
      LAMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                               TISSUE-Brain;
MEDLINE-97157768; PubMed-9004047;
MEDLINE-97157768; PubMed-9004047;
Wilson D.J.A., Kim D.S., Clarke G.A., Marshall-Clarke S.,
"A family of glycoproteins (GP55), which inhibit neurite c
are members of the Ig superfamily and are related to OBCAN
neurotrimin, LAMP and CEPU-1.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LIPID
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LAMP_CHICK Q98919;
  Brummendorf T., Spaltmann F., Treubert U.; "Cloning and characterization of a neural cell recognition molecule on axons of the retinotectal system and spinal cord.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
                                                             TISSUE=Brain;
MEDLINE=97358596; PubMed=9215692;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G19-isoform).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Limbic system-associated membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                            Gallus gallus (Chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                              Archosauria; Aves;
                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
                                                                                                               SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 ISWAIFTGLAALCLF----QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDDRVTRVAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VPSAEFQWYKDDKKLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HLIVQVPPQIMNISSDITVNEISSVTLLCLAIGRPEPTVTWRHLSVKEGQGFVSEDEXLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPK-AVGFVSEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VPMAEFQWFKEDTRLATGLDGVRIENKGRISTLTFFNVSEKDYGNYTCVATNKLGNTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LNRSTILYAGNDKWSIDPRVIILVNTPTQYSIMIQNVDVYDEGPYTCSVQTDNHPKTSRV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ITLYGPGAVIDGVNSASRALACLWLSGTFFAHFFIKF 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ISDIKRDQSGEYECSALNDVAAPDVRKVKITVNYPPYISKAKNTGVSVGQKGILSCEASA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Rel. 35, Created)
(Rel. 35, Last sequence up
(Rel. 40, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                157
244
70
140
285
293
306
322
                                                                                                             N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΑĄ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
retinotectal system and spinal cord.
                                                                                                                                                                                                                                                                                                                                                                                              Neognathae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              202
296
296
70
140
285
293
306
322
                                                                                                                                                                                                                                                                                                                                                                                                                        Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69.7%;
71.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₩.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-LINKED (GLCNAC...
N-LINKED (GLCNAC...
N-LINKED (GLCNAC...
N-LINKED (GLCNAC...
N-LINKED (GLCNAC...
N-LINKED (GLCNAC...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1259;
Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GPI-ANCHOR (POTENTIAL).
MGVCGYLFLPWKCLVVVSLRLLFLVPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SATTALLFIP (IN ISOFORM
                                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A3181B0753F9658E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein precursor (E19S) (CHLAMP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.3e-94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (POTENTIAL).
                                                                                                                                                                                                    OBCAM
                                                                                                                                                                                                                    outgrowth,
                                                                                                                                                                                                                                             Moss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MYHPAYWIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2:
```

```
Qγ
                                                                                      밁
                                                                                                          QΥ
                                                                                                                                 D
                                                                                                                                                      Q
                                                                                                                                                                               멁
                   ρy
                                            밁
                                                                                                                                                                                                Q
 밁
                                                                                                                                                                                                                                   Query Match
Best Local S
                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                    CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                 DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entities requires a license agreement or send an email to license@isb-sib.ch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -i-
                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                                      CARBOHYD
                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR003006; Ig_MHC.
InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Immunoglobulin domain; Cell
 255
                      259
                                            195
                                                                 199
                                                                                       135
                                                                                                             139
                                                                                                                                                                               17
                                                                                                                                  75
                                                                                                                                                       79
                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       European Bioinformatics Institute. There are no rest
by non-profit institutions as long as its content
ified and this statement is not removed. Usage by ar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . J. Neurosci. 9:1105-1116(1997).
FUNCTION: MEDIATES SELECTIVE NEURONAL GROWTH AND AXON TARGETING.
PROBABLY SERVES AS A RECOGNITION MOLECULE FOR THE FORMATION OF
LIMBIC CONNECTIONS (BY SIMILARITY).
SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor (
similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY: CONTAINS 3 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY:
                                                                                                                                                                                          LAALCLE-QGVEVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRŠTILYAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SWISS-PROT
DTR-INSANGLEIKSTGSQSLLMVANVTEEHYGNYTCVAANKLGVTNASLYLYRPG-TGR
           DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE
                                          YECKAANEVASADVKQVRVTVNYPPTITESKSNEAATGRQALLRCEASAVPTPDFEWYRD
                                                      YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD
                                                                                      SNISSDITVNEGSNVTLVCMANGRPEPVITWRHLTPTGKEFEGEEEYLEILGITREQSGK
                                                                                                   VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD
                                                                                                                                 EDKWSLDPRVELEKRSPLEYSLRIQKVDVYDEGSYTCSVQTQHHPKTSQVYLIVQVPPKI
                                                                                                                                               NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI
                                                                                                                                                                               LRLLCLLPTGLPVRSVD--FTRGTDNITVRQGDTAILRCFVEDRSSKVAWLNRSGIIFAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Y08171;
Z94720;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PF00047; ig; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SM00408;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SM00410; IG_like; 1.
SM00408; IGC2; 2.
                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ignai
                                                                                                                                                                                                                                                                                                                                                                                29
46
146
232
53
153
239
                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOT entry is copyright.
Swiss Institute of Bioi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAA69357.1; -. CAB08115.1; -.
                                                                                                                                                                                                                                                                                  ĀĀ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                338
118
204
297
111
197
290
                                                                                                                                                                                                                                                                                           40
66
136
148
279
287
300
315
                                                                                                                                                                                                                                     52.0%;
56.0%;
                                                                                                                                                                                                                                                                                  MW.
                                                                                                                                                                                                                           56;
                                                                                                                                                                                                                          Score 938.5;
Pred. No. 1.6e
56; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                         PROTEIN.

REMOVED IN MATURE
IG-LIKE C2-TYPE D
IG-LIKE C2-TYPE D
IG-LIKE C2-TYPE D
POTENTIAL.
POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       adhesion; Glycoprotein;
                                                                                                                                                                                                                                                                                          N-LINKED
N-LINKED
N-LINKED
N-LINKED
N-LINKED
N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
                                                                                                                                                                                                                                                                                 8FA4A60AD98426B4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        It is produced through a collaboration informatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SYSTEM-ASSOCIATED
                                                                                                                                                                                                                                                                                           (GLCNAC. . ) (GLCNAC. . )
                                                                                                                                                                                                                                                                                                                       GLCNAC...
(GLCNAC...
(GLCNAC...
(GLCNAC...
(GLCNAC...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (See http://www.isb-sib.ch/announce,
                                                                                                                                                                                                                   ); DB 1,
1.6e-68;
82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 MATURE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                 DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
                                                                                                                                                                                                                                                                                  CRC64;
                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                    (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                                                                                                                                                                                                                                    (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GPI-anchor;
                                                                                                                                                                                                                                                                                                                            (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (POTENTIAL)
                                                                                                                                                                                                                                                                                            (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              restrictions on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEMBRANE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GPI-anchor (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and for
                                                                                                                                                                                                                                                338;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IGLON
                                                                                                                                                                                                                          5
                                                                                                                                                                                                                         Gaps
                                                                                                                                 134
                                                                                                                                                                               74
                                                                                                                                                                                                    78
                                          254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  way
                                                                                                                                                                                                                          4;
```

```
ALD DOORS REPRESENTED TO THE PROPERTY OF THE P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gene 170:189-195(1996).

IF FUNCTION: MEDIATES SELECTIVE NEURONAL GROWTH AND AXON TARGETING. CONTRIBUTES TO THE GUIDANCE OF DEVELOPING AXONS AND REMODELING OF MATURE CIRCUITS IN THE LIMBIC SYSTEM. ESSENITAL FOR NORMAL GROWTH OF THE HYPPOCAMPAL MOSSY FIBER PROJECTION (BY SIMILARITY).

SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor. TISSUE SPECIFICITY: EXPRESSED ON LIMBIC NEURONS AND FIBER TRACTS AS WELL AS IN SINGLE LAYERS OF THE SUPERIOR COLLICULUS, SPINAL CHORD AND CEREBELLUM.

SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY. IGLON SUBFRMILY.

SUBFAMILY:

SUBFAMILY
                                                                                                          CARBOHYD
CARBOHYD
                                                                                                                                                               CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HUMAN
                                                                                                                                                                                                                                              DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Limbic system-associated membrane protein prediction of LAMP.
                                                                                                                                                                                                                                                                                                   DOMAIN
                                                                                                                                                                                                                                                                                                                                                        PROPEP
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Repeat;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          use by non-profit institutions as long a
modified and this statement is not removed.
entities requires a license agreement (See
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entropean Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pimenta A.F., Fischer I., Levitt P.; "cDNA cloning and structural analysis associated membrane protein (LAMP).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                         CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00047; ig;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MIM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        013449;
     CARBOHYD
                                 CARBOHYD
                                                          CARBOHYD
                                                                                    CARBOHYD
                                                                                                                                                                                                                       DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U41901; AAC50569.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE-96235133;
                                                                                                                                                                                                                                                                                                                                  DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAMP_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313 VDNGSVSLAVPLWLLAASLLCLLSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     319 VSNGTSRRAGCVWLLPLLVLHLLLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603241;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SM00410; IG_like; 1.
SM00408; IGC2; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IPR003006; Ig_MHC.
IPR003598; Ig_c2.
IPR003600; Ig_like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PubMed=8666243;
     338
1118
204
297
297
1111
1197
290
40
40
136
136
148
279
315
                                                                                                                                                                                                                                                                                                                                                                                                                                       28
315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cell
N-LINKED
N-LINKED
N-LINKED
N-LINKED
                                                                                                                              POTENTIAL.
POTENTIAL.
POTENTIAL.
N-LINKED ((
N-LINKED ((
N-LINKED ((
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     adhesion; Glycoprotein;
                                                                                                                                                                                                                                                                                                REMOVED IN MATURE FORM IG-LIKE C2-TYPE DOMAIN IG-LIKE C2-TYPE DOMAIN IG-LIKE C2-TYPE DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                             PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                         LIMBIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       343
                                                                                                                                                                                                                                                                                                                                                                                                                                       SYSTEM-ASSOCIATED MEMBRANE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 338
                      (GLCNAC
(GLCNAC
(GLCNAC
(GLCNAC
(GLCNAC
(GLCNAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0f
  (GLCNAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Usage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            limbic-system-
                                               (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GPI-anchor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γď
                                                                                                                                                                                                                                                                                                      ω 22 F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (LSAMP)
     (POTENTIAL)
                              (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                 (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 restrictions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a collaboration
MBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             outstation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GROWTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        way
```

LIPID

GPI-ANCHOR (POTENTIAL).

```
Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAMP_RAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                       -!- FUNCTION: MEDIATES SELECTIVE NEURONAL GROWTH AND AXON TARGETING.
CONTRIBUTES TO THE GUIDANCE OF DEVELOPING AXONS AND REMODELING OF
MATURE CIRCUITS IN THE LIMBIC SYSTEM. ESSENTIAL FOR NORMAL GROWTH
OF THE HYPPOCAMPAL MOSSY FIBER PROJECTION.

-!- SUBCELULAR LOCATION: Attached to the membrane by a GPI-anchor.
-!- TISSUE SPECIFICITY: EXPRESSED MOSTLY BY NEURONS COMPRISING LIMBIC-
ASSOCIATED CORTICAL AND SUBCORTICAL REGIONS THAT FUNCTION IN
COGNITION, EMOTION, MEMORY, AND LEARNING.
-!- DEVELOPMENYAL STAGE: FIRST DETECTED AT E15-16, AT STAGE E20 IT IS
DETECTED IN PRESUMPTIVE CORTEX, MEDIAL LIMBIC AREAS OF THE
THALAMUS AND HYPOTHALAMUS. IN THE ADULT, IT IS FOUND IN
HYPOTHALAMUS, PERIRHINAL CORTEX, AMYGDALA AND MEDIAL THALAMIC
PERCYCN.
     This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IAMP_RAT STANDARD; PRT; 338 AA. 062813; O1-NOV-1997 (Rel. 35, Created) O1-NOV-1997 (Rel. 35, Last sequence update) 30-MAY-2000 (Rel. 39, Last annotation update)
                                                                                                                                                                                                                                                                                                                                           Pimenta A.F., Zhukareva V., Barbe M.F., Reinoso B.S., Grimley C., Henzel W., Fischer I., Levitt P., "The limbic system-associated membrane protein is an Ig superfamily member that mediates selective neuronal growth and axon targeting.";
                                   SUBFAMILY: CONTAINS 3 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS.
                                                                                                                                                                                                                                                                                                                            Neuron
                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Hippocampus;
MEDLINE-95374785; PubMed-7646886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., AND SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Limbic system-associated membrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LSAMP OR LAMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   314 I-NGSISLAVPLWLLAASLLCLLSK 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                         SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY IGLON
                                                                                                                                                                                                                                                                                                               ron 15:287-297(1995). FUNCTION: MEDIATES S
SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VSNGTSRRAGCYWLLPLLVLHLLLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DTR-INSANGLEIKSTEGQSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLERPGSVRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNISSDVTVNEGSNVTLVCMANGRPEPVITWRHLTPTGREFEGEEEYLEILGITREQSGK 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HDKWSLDPRVELEKRHSLEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LRLLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVLEDKNSKVAWLNRSGIIFAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  315
338 /
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĀΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    315
37308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51.6%;
55.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 931.5;
Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03455F286DF5D92F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .9e-68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  precursor (LSAMP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4
```

```
RESULT
KILO_RA
ID KI
AC QS
DT 3(
DT 3(
                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                             밁
                                                                                                                                                Q
                                                                                                                                                                     B
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                               CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        between the Swiss Institute of Bioinformatics and the EMBL outst
the European Bioinformatics Institute. There are no restrictions
use by ron-profit institutions as long as its content is in
modified and this statement is not removed. Usage by and for com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Repeat; Signal SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00410; IG_like; 1.
SMART; SM00408; IGC2; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00047; ig; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; U31554; AAA86120.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or send an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entities requires a
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Immunoglobulin domain;
                                                                                                       319
                                                                                                                                                 259
                                                                                                                                                                      195
                                                                                                                                                                                          199
                                                                                                                                                                                                               135
                                                                                                                                                                                                                                   139
                                                                                  314 I-NGSISLAVPLWLLAASLFCLLSK
                                                                                                                             255
                                                                                                                                                                                                                                                       75
                                                                                                                                                                                                                                                                           79
                                                                                                                                                                                                                                                                                                17
                                                                                                                                                                                                                                                                                                         20 LAALCLF-QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG
                                                                                                                                                                                                                                                                                                                                                   Local
                                                    10
                                                                                                      VSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                      DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSE
                                                                                                                                                                                        YECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD
                                                                                                                                                                                                            SNISSDYTVNEGSNVTLVCMANGRPEPVITWRHLTPLGREFEGEEEYLEILGITREQSGK 194
                                                                                                                                                                                                                         VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD
                                                                                                                                                                                                                                                     HDKWSLDPRVELEKRHALEYSLRIQKVDVYDEGSYTCSVQTQHEPKTSQVYLIVQVPPKI
                                                                                                                                                                                                                                                                          NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKI
                                                                                                                                                                                                                                                                                               LRLLCLLPTGLPVRSVD--FNRGTDNITVRQGDTAILRCVVEDKNSKVAWLNRSGIIFAG
                                                                                                                           DTR-INSANGLEIKSTEGQSSLTVTNVTEEHYGNYTCVAANKLGVTNASLVLFRPGSVRG
                                                                                                                                                                     YECKAANEVSSADVKQVKVTVNYPPTITESKSNEATTGRQASLKCEASAVPAPDFEWYRD
                                                                                                                                                                                                                                                                                                                                         al Similarity
179; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IPR003600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IPR003598;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IPR003006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    equires a license agreement (S email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                         316
46
146
232
232
232
232
232
232
231
315
315
                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29
                                                                                                                                                                                                                                                                                                                                                                                             AΑ
                                                                                                                                                                                                                                                                                                                                                                                                     338
118
204
297
1111
1197
290
290
2148
1148
279
279
3150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28
315
                                                                                                                                                                                                                                                                                                                                                                                            37324
                                                                                                                                                                                                                                                                                                                                                 51.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ig_c2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ig_like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cell adhesion; Glycoprotein; GPI-anchor;
                                                                                                                                                                                                                                                                                                                                                                                             MW;
                                                                                                                                                                                                                                                                                                                                        60;
                                                                                                                                                                                                                                                                                                                                                                                                     N-LINKED (GLCNAC...)
GPI-ANCHOR (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REMOVED IN MATURE FORM (
IG-LIKE C2-TYPE DOMAIN 1
IG-LIKE C2-TYPE DOMAIN 2
IG-LIKE C2-TYPE DOMAIN 3
POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                  Score 926.5;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                             0B76AFDD68A39BB6 CRC64;
                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SYSTEM-ASSOCIATED MEMBRANE
                                                                                                                                                                                                                                                                                                                                                                                                                       (GLCNAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                   .5e-67;
                                                                                                                                                                                                                                                                                                                                                              DB
                                                                                                                                                                                                                                                                                                                                         81;
                                                                                                                                                                                                                                                                                                                                                             Length 338;
                                                                                                                                                                                                                                                                                                                                                                                                                         (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
) (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                         5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          outstation
                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           commercial
                                                                                                                                                                                                                                                       134
                                                                                                                                                                                                                                                                           138
                                                                                                                                                318
                                                                                                                                                                                         258
                                                                                                                                                                                                                                                                                                74
                                                                                                                                                                     254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     way
                                                                                                                                                                                                                                                                                                                                         4.
```

PRT;

348

AA.

sequence update

```
QУ
                                                    Db
                                                                           δÃ
                                                                                                       DЪ
                                                                                                                             Qy
                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                               DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                    PROPEP
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                          Repeat;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             family.",
J. BLOI. Chem. 274:8224-8230(1999).
-i- FUNCTION: CELL-ADHESION (POTENTIAL).
-i- SUBCELLULAR LOCATION: Attached to the membrane by
-i- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN BRAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                use by non-profit institutions as long amodified and this statement is not removed.
                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                          CARBOHYD
                                                                                                                                                                                                                                                     CARBOHYD
                                                                                                                                                                                                                                                                CARBOHYD
                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                        CARBOHYD
                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                              CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMART; SM00408; IGc2; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00047; ig; 3.
SMART; SM00410; IG_like; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR003006; Ig_MHC.
InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AB017139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          between the Swiss Institute of Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Characterization of a novel rat brain glycosylphosphatidylinositol-
anchored protein (Kilon), a member of the IgLON cell adhesion molecu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Funatsu N., Miyata S., Kumanogoh H., Shigeta M., Hamada Sokawa Y., Maekawa S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A., AND SEQUENCE OF MEDLINE=99175207; PubMed=10075727;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-OCT-2001 (Rel. 40, Last annotation update) Kilon protein precursor (Kindred of IgLON).
                                                                                                                                                                                                                                                                               CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunoglobulin domain; Cell
    125
                            128
                                                                                                                                                           Local Si
hes 160;
                                                    65
                                                                             68
                                                                                                       11
                                                                                                                              11 SISW--AIFTGLAALCLFQGVPVRSGDATFP-KAMDNVTVRQGESATLRCTIDNRVTRVA 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY: CONTAINS 3 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PTM: GLYCOSYLATED.
                          VHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLE
                                                                   WLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSR 127
VHLTVQVPPKIYDISNDMTINEGTNVTLTCLATGKPEPAISWRHISPSAKPF-ENGQYLD
                                                  WINRSSIFAGGDKWSVDPRVSISTLNKRDYSLQIQNVDVTDDGPYTCSVQTQHTPRTMQ
                                                                                                     SNQWLAAVLLSLCS-CLPAGQSV-----DFPWAAVDNMLVRKGDTAVLRCYLEDGASKGA
                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                        Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     requires
                                                                                                                                                                                                                                        147
232
232
232
154
239
249
249
280
280
                                                                                                                                                                                                                           ΑA;
                                                                                                                                                                                                                    197
291
67
149
269
280
288
301
37858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BAA75649.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY. IGLON
                                                                                                                                                                                                                                                                                                                                             348
119
204
300
112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Institute of Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                      45.18;
47.58;
                                                                                                                                                                                                                           MW;
                                                                                                                                                           66;
                                                                                                                                                                                                                        N-LINKED (GLCNAC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    adhesion; Glycoprotein; GPI-anchor;
                                                                                                                                                                                                                                                                                                                               POTENTIAL. POTENTIAL.
                                                                                                                                                                      Score 815;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                        REMOVED IN MATURE FORM IG-LIKE C2-TYPE DOMAIN IG-LIKE C2-TYPE DOMAIN IG-LIKE C2-TYPE DOMAIN
                                                                                                                                                                                                                                                                                                                    POTENTIAL.
                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32-62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            There are no restrictions on ng as its content is in no
                                                                                                                                                                      DB 1;
L.5e-58;
                                                                                                                                                           101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Usage
                                                                                                                                                                                 Length 348;
                                                                                                                                                                                                                           CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and the EMBL outstation
                                                                                                                                                           Indels
                                                                                                                                                                                                                                    ) (POTENTIAL).
) (POTENTIAL).
) (POTENTIAL).
) (POTENTIAL).
) (POTENTIAL).
) (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Уď
                                                                                                                                                                                                                                                                                                                                                                                                (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GPI-anchor
                                                                                                                                                          10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Endo Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  molecule
                                                                                                                                                        Gaps
                                                                                                     64
                                                  124
                                                                                                                                                       ū
```

```
멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AMAL_DROME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                 Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,

RA Amanatides P.G., Scherer S.E., Richards S., Ashburner M., Henderson S.N.,

RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,

RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,

RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,

RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,

RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,

RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,

RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,

RA Ballew R.M., Basu A., An H.-J., Andrews-pfannkoch C., Baldwin D.,

RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,

Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,

Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Brottier P.,

RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,

RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,

RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,

RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,

RA Dodson K. Dunt I. F. Downes M. D., Dew I., Dietz S.M.,

Dodson K. Dunt I. F. Downes M. D., Dew I., Dietz S.M.,

Dodson K. Dunt I. F. Downes M. D., Dew I., Dietz S.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AMAL_DROME (
P15364; Q9V3A5;
01-APR-1990 (Re
Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
Harris N.L., Harvey D., Heiman T. J., Hernandez J.R., Houck J.,
Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K
Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seeger M.A., Haffley L., Kaufman T.C.; "Characterization of amalgam: a member of the immunoglobulin superfamily from Drosophila.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Amalgam protein precursor.

AMA OR BG:DS00276.6 OR CG2198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-APR-1990 (Rel. 14,
16-OCT-2001 (Rel. 40,
01-MAR-2002 (Rel. 41,
                                                                                                                                                                                                                                                 Durbin K.J.,
Fosler C., G
                                                                                                                                                                                                                                                                        Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Celniker S.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-BERKELEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. STRAIN=OREGON-R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=20196006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=BERKELEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Palazzolo M.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=89028670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ephydroidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cell 55:589-600(1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=7227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          304 LPLNPPSTAQYGITGSACDLFSCWSLALTLSSVISIF 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VPPPAFEWYKGEKRLFNGQQGIIIQNFSTRSILTYTNYTQEHFGNYTCVAANKLGTTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IYGITRDQAGEYECSAENDVSFPDVKKVRVVVNFAPTIQEIKSGTVTPGRSGLIRCEGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASA 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (JAN-1999) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence of the Antennapedia complex of Drosophila.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfeiffer B.D., Knafels J., Martin C.H., Mayeda C.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PubMed=10731132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed=3141062;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      databases.
                                                                                                                                                  Ketchum K.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                       ۳.
                                                                                                                                                                                                                                                                             Σ.
```

```
Ş,
                           밁
                                                   Qy
                                                                                            Query
Best L
                                                                               Matches
                                                                                                                                                                                                  DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H., Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T., Spier E., Spradling A.C., Stapleton M., Strong R., Sun E., Syriskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X., Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J., Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A., Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L., Zhong X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Zhu X., Smith H.O., Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.; "The genome sequence of Drosophila melanogaster."; Science 287:2185-2195(2000).
                                                                                                                                               CONFLICT
                                                                                                                                                                                                                                                                                               CHAIN
PROPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gonzalez M., Guarin H., Li P., Liao G., Miranda A., Mungall C. Nunco J., Pacleb J., Paragas V., Park S., Phouanenavong S., Wa Yu C., Lewis S.E., Rubin G.M., Celniker S., Rubin G.M., Celniker S., Extended (AUG-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-Berkeley; TISSUE-Embryo; Stapleton M., Brokstein P., Hong L., Champe M., Chavez C., Dorsett V., Fa
                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                        CARBOHYD
                                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                      DOMAIN
                                                                                                                                                                                                                                                                                    DOMAIN
                                                                                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the European Bioinformatics Institute. Thuse by non-profit institutions as long
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -i- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
-i- SIMILARITY: CONTAINS 1 IMMUNOGLOBULIN-LIKE V-TYPE DOMAIN.
-i- SIMILARITY: CONTAINS 2 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS
                                                                                                                                                                          CARBOHYD
                                                                                                                                                                                                                                                                                                                                        Immunogiobulin
                                                                                                                                                                                                                                                                                                                                                     SMART;
                                                                                                                                                                                                                                                                                                                                                                 SMART;
                                                                                                                                                                                                                                                                                                                                                                               Pfam;
                                                                                                                                                                                                                                                                                                                                                                                          InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                FlyBase; FBgn0000071; Ama.
                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR; A31923; A31923
                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A
                                                                                            Local
  94
                           ^{3}_{\omega}
                                                   44 NVTVRQGESATLRCTIDN-RVTRVAWLNR-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBCELLULAR LOCATION: ATTACHED TO THE MEMBRANE BY A GPI-ANCHOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (POSSIBLE).
TQTQ---YSIEIQNVDVYDEGPYTCSVQTDNHPK-TSRVHLIVQVSPKIVE-ISSDISIN 148
                         DVVASVGDSVEFNCTVEEVGQLSVSWAKRPSESDTNSVVLSMRNILSLPDQRYNVTVTEG
                                                                                                                                                                                                                                                                                                                                                                               PF00047;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AE001572; AAD19797.1;
AE003674; AAF54084.1;
AY051911; AAK93335.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                M23561;
                                                                                                                                                                                                                                                                                                                                                   PF00047; ig; 3.
SM00410; IG_like; 1.
SM00408; IGC2; 2.
                                                                              87; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the Swiss Institute of
                                                                                                                                                                                                                                                                                                                                                                                         IPR003598; Ig_c2
                                                                                                                                                                                                                                                                                                                                                                                                       IPR003006;
                                                                                                                                                                                                                                                                                                                                                                                                                   IPR003599; Ig.
                                                                                                                                              email to license@isb-sib.ch).
                                                                                                                                                           1 domain;
1 23
1 23
3 3 3 3
1 127
2 15
3 14
3 117
2 16
3 08
3 07
4 5
8 6
8 8
8 8
8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA28367.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                               36387
                                                                                          16.5%;
29.7%;
                                                                                                                                                                                                                                                                                                                                                                                                       Ig_MHC
                                                                                                                                                                                                                                                                                                                                       Glycoprotein; GPI-anchor;
                                                                                                                                               MW;
                                                                              43;
                                                                                                                                             PROBABLE:

N-LINKED (GLCNAC. . .) (
Q -> K (IN REF. 1).

W; F644753DE3DB25F1 CRC64
                                                                                         Score
Pred.
                                                                                                                                                                                                                               PROBABLE.
                                                                                                                                                                                                                                            PROBABLE
                                                                                                                                                                                                                                                       IG-LIKE V-TYPE DOMAIN.
IG-LIKE C2-TYPE DOMAIN
IG-LIKE C2-TYPE DOMAIN
                                                                                                                                                                                                                                                                                              AMALGAM PROTEIN.
REMOVED IN MATURE FORM
                                                                                                                                                                                                                                                                                                                           POTENTIAL.
                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bioinformatics and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      L., Agbayani A., Carls
Farfan D., Frise E.,
                                                                                         297.5; DB 1
No. 7.9e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              There are no restrictions ng as its content is in
                                                  STILYAGNDKWCLDPR--VVLLSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Usage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,
                                                                                                                                               CRC64;
                                                                                                                                                                                                                                                                                                                                     Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Carlson
                                                                              Indels
                                                                                                       Length
                                                                                                                                                                      ) (POTENTIAL).
) (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    уd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         George
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL outstation
                                                                                                                                                                                                                                                                                                                                     Repeat
                                                                            .. 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٦.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
.
.
.
                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
                         92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                           11;
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                              J. Biol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCA2_MOUSE STANDARD; PRT; 725 AA.

P13594; 061950;
01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
01-MAR-2002 (Rel. 41, Last annotation update)
Neural cell adhesion molecule, phosphatidylinositol-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LT 12
MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Barthels D., Santoni M.-J., Wille W., Ruppert C., Caix J.-C., Hirsch M.-R., Fontecilla-Camps J.-C., Goridis C.; "Isolation and nucleotide sequence of mouse NCAM cDNA that co a Mr 79,000 polypeptide without a membrane-spanning region."; EMBO J. 6:907-914(1987).
                This
                                                                                                                                                                                                                                                                                                                                                                                                                                  Santoni M.J., Barthels D., Vopper G., Boned A., Goridis C., Wille "Differential exon usage involving an unusual splicing mechanism generates at least tacht types of NCAM cDNA in mouse brain.";
                                                                                                                                                                                                           "Structural and immunological characterization domain of mammalian neural cell adhesion molecu
                                                                                                                                                                                                                                                          MEDLINE=86140120; PubMed=3512556;
                                                                                                                                                                                                                                                                                                                        "Differential splicing and alternative distinct NCAM transcripts and proteins
                                                                                                                                                                                                                                                                                                                                                        Barbas J.A., Chaix J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                          EMBO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Santoni M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=C57BL/6; TISSUE=Brain; MEDLINE=89251563; PubMed=2721486;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=C57BL/6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCAM1 OR NCAM.
                                                                                                                                                                                                                                            Rougon G., Marshak D.R.;
                                                                                                                                                                                                                                                                                                              EMBO
                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=88283628;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=87246524; PubMed=3595563;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                precursor (N-CAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93
                                          SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor. ALTERNATIVE PRODUCTS: THE DIFFERENT TISSUE-SPECIFIC FORMS OF N-CAM ARE PRODUCED BY ALTERNATIVE SPLICING.
SIMILARITY: BELONGS TO THE IMMUNOCLOBULIN SUPERFAMILY.
SIMILARITY: CONTAINS 5 IMMUNOCLOBULIN-LIKE C2-TYPE DOMAINS.
SIMILARITY: CONTAINS 2 FIBRONECTIN TYPE III-LIKE DOMAINS.
                                                                                                                                                                           Biol. Chem. 261:3396-3401(1986).
FUNCTION: THIS PROTEIN IS A CELL ADHESION MOLECULE
                                                                                                                                             NEURON-NEURON ADHESION, NEURITES, ETC.
SWISS-PROT entry is copyright.
een the Swiss Institute of Bic
                                                                                                                                                                                                                                                                                                                                                                                                                          J. 8:385-392(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QSSRHHEVANTASSSGTTTSVLRIDSVGEEDFGDYYCNATNKLGHADARLHLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EGKKGVKVENR-----PFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NDVAAPVVRRVKVTVNYPPYIS-EAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EGQNLELTCHANGFPKPTISWAREHNAVMP-AGGHLLAEPTLRIRSVHRMDRGGYYCIAQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EGNNISLTCIATGRPEPTYTWRH----ISPKAYGFYSEDEYLEIQGITREQSGDYECSAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PKTGSAIYTFRIQNIEVSDMGPYECQVLVSATEKVTKKLSLQIKTPPVIAENTPKSTLVT 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NGEGQPDKRLIRVEVEFRPQIAVQRPKIAQMVSHSAELECSVQGYPAPTVVWHKNGVPL-
                                                                                                                                                                                                                                                                                                           7:625-632(1988)
                                                                                                                                                                                                                                                                                                                                                                                          OF 642-725 FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OF 20-700 FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          =
=
=
=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120) (NCAM-120).
                                                                                                                                                                                                                                                                                                                                                                       '25 FROM N.A.
PubMed=3396534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chordata;
                                                                                                                                                                                                                                                                                                                                                          Steinmetz M.,
                                                                                                                                                          NEURITE FASCICULATION,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Sciurognathi; Muridae;
Bioinformatics
             It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                        Goridis C.; polyadenylation in the mouse.";
                                                                                                                                                                                                             molecules
                                                                                                                                                                                                                          of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goridis C., Wille M.;
                                                                                                                                                                                                             the amino-terminal s.";
                                                                                                                                                            OUTGROWTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Murinae;
                                                                                                                                                            GROWTH OF
                                                                                                                                                                                                                                                                                                                                         generates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    codes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus
                                                                                                                                                                             H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          211
```

and

the

EMBL outstation

```
Qy
                                                                                                                Βþ
                                                                                                                                                 δÃ
                                                                                                                                                                                                                       Š
 Qy.
                                      В
                                                                                                                                                                                      Вp
                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam;
                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00060; FN3; 2.
SMART; SM00408; IGc2; 5.
Cell adhesion; Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00041; fn3; 2
Pfam; PF00047; ig; 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR003961; FN_III.
InterPro; IPR003006; Ig_MHC.
InterPro; IPR003598; Ig_c2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the European Bioinformatics Institute. There are no restrictions on use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and for commendations of the commendation 
                                                                                                                                                                                                                                                                                                                                                                                                              CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunoglobulin domain; Signal;
201 CSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDK 260
                                        329
                                                                           156
                                                                                                                269
                                                                                                                                                                                      222
                                                                                                                                                                                                                     44 NVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVV------LLSNTQ 95
                                                                                                                                                   96
                                                                                                                                                                                                                                                                              Local
                                    TCEASGDPIPSITWRTSTRNISSEEQDLDGHMVVRSHARVSS---LTLKSIQYRDAGEYM 385
                                                                         TCIATGRPEPTVTWR----
                                                                                                            DSSEVTIRNVDKNDEAEYVCIAENKAGEQDASIHLKVFAKPKITYVENQTAMELEEQVTL
                                                                                                                                               TQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISL 155
                                                                                                                                                                                  NATANLGQSVTLVCDADG-----FPEPTM-----SWTKDGEPIENEEEDERSRSSVS 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MGI:97281; Ncam.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A29673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             X15049; CAA33148.1; ALT_SEQ.
X07195; CAA30173.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Y00051;
                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IJMSNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAA68263.1; -
                                                                                                                                                                                                                                                                                                                                                       AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                189
288
386
480
222
316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   393
487
596
                                                                                                                                                                                                                                                                                                                                                       80296 MW;
                                                                                                                                                                                                                                                                              15.7%;
                                                                     -----HISPKAVGFVSEDEYLEIQGITREQSGDYE 200
                                                                                                                                                                                                                                                              45;
                                                                                                                                                                                                                                                                                                                                                                                                                        V -> L (IN REF. 2).
QD -> KT (IN REF. 2).
T -> K (IN REF. 2).
T -> R (IN REF. 2).
D -> V (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IG-LIKE C2-TYPE DOMAIN 1.
IG-LIKE C2-TYPE DOMAIN 2.
IG-LIKE C2-TYPE DOMAIN 3.
IG-LIKE C2-TYPE DOMAIN 4.
IG-LIKE C2-TYPE DOMAIN 5.
FIBRONECTIN TYPE-III 1.
FIBRONECTIN TYPE-III 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-LINKED
                                                                                                                                                                                                                                                                                             Score 283.5;
                                                                                                                                                                                                                                                                                                                                                                     MQPSES -> SAATEF (IN REF. 2).
PEL -> REP (IN REF. 2).
H -> D (IN REF. 2 AND 3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-LINKED
                                                                                                                                                                                                                                                                                Pred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Repeat; Alternative splicing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ERSRSSVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROBABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROBABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROBABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PHOSPHATIDYLINOSITOL-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NEURAL CELL
                                                                                                                                                                                                                                                                                                                                                       C2AEB8B4461C6B2F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Heparin-binding;
                                                                                                                                                                                                                                                            Mismatches 130;
                                                                                                                                                                                                                                                                              No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GLCNAC...)
(GLCNAC...)
(GLCNAC...)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -> DEKHIFSD (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GLCNAC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GLCNAC. . .)
                                                                                                                                                                                                                                                                                3e-15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADHESION MOLECULE
                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . 2).
- 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                       CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GPI-anchor,
                                                                                                                                                                                                                                                                                           Length 725;
                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (POTENSIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ISOFORM.
                                                                                                                                                                                                                                                          41;
                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                        7;
```

```
NCA1_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P13595; Q61949;
01-JAN-1990 (Rel. 13, Q
01-JUL-1993 (Rel. 26, I
01-MAR-2002 (Rel. 41, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    _MOUSE
NCA1_MOUSE
                             domain of mammalian neural cell adhesion molecules.";
J. Biol. Chem. 261:3396-3401(1986).
-!- FUNCTION: THIS PROTEIN IS A CELL ADHESION MOLECULE INVOLVED
                                                                                                                                                                                             Santoni M.J., Barthels D., Vopper G., Boned A., Goridis C., Wille "Differential exon usage involving an unusual splicing mechanism generates at least eight types of NCAM cDNA in mouse brain.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "DIFFERENCE AND TRANSCRIPTS and proteins in the mouse.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Analysis of cDNA clones that code for the transmembrane forms of the mouse neural cell adhesion molecule (NCAM) and are generated by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Barthels D., Santoni M.J., Wille W., Ruppert C., Chaix J.C., Hirsch M.R., Fontecilla-Camps J.C., Goridis C.; "Isolation and nucleotide sequence of mouse NCAM cDNA that codes for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-UT-1993 (Rel. 26, Last sequence update)
01-MAR-2002 (Rel. 41, Last annotation update)
Neural cell adhesion molecule, large isoform precursor (N-CAM 180)
                                                                                                         MEDLINE=86140120; PubMed=3512556; Rougon G., Marshak D.R.;
                                                                                                                                                                                                                                                          STRAIN=C57BI,/6; TISSUE=Brain;
MEDLINE=89251563; PubMed=2721486;
                                                                                                                                                                                                                                                                                                                                      the mouse, is encoded by an alternatively spliced transcript."; Nucleic Acids Res. 16:4217-4225(1988).
                                                                                                                                                                                                                                                                                                                                                        "NCAM-180, the large isoform of the neural cell adhesion molecule the mouse, is encoded by an alternatively spliced transcript.";
                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-C57BL/6J; TISSUE-Brain; MEDLINE-88247737; PubMed-2454455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Barbas J.A., Chaix J.C., Steinmetz M., Goridis C., "Differential splicing and alternative polyadenyla"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Santoni M.-J., Barthels D., Barbas J.A., Hirsch M.-R., Steinmetz M., Goridis C., Wille W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=C57BL/6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCAM1 OR NCAM.
                                                                                   "Structural and immunological characterization of the amino-terminal
                                                                                                                                                                                                                                                                                              SEQUENCE OF 702-1115 FROM N.A. (N-CAM 140)
                                                                                                                                                                                                                                                                                                                                                                                                Barthels D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 804-1081 FROM N.A. (N-CAM 180)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBO J. 7:625-632(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=88283628; PubMed=3396534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 642-1115 FROM N.A. (N-CAM 180)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic Acids Res. 15:8621-8641(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             alternative RNA splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=88067687; PubMed=3684567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 529-1115 FROM N.A. (N-CAM 140)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBO J. 6:907-914(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. (N-CAM 180).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
                                                                                                                                                 SEQUENCE OF 20-36.
                                                                                                                                                                                   MBO J. 8:385-392(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=87246524; PubMed=3595563;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (NCAM-180) [Contains: N-CAM 140 (NCAM-140)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    445 LLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESLEFIL 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386 CTASNTIGQD-SQSIDLEFQYAPKLQGPVAVYTWEGNQVNITCEVFAYPSATISWFRDGQ 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     261 RLIEGK-KGYKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML 310
             NEURON-NEURON ADHESION, NEURITE FASCICULATION, OUTGROWTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79,000 polypeptide without a membrane-spanning region.";
                                                                                                                                                                                                                                                                                                                                                                                              Vopper G., Wille W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Craniata; Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Muridae; Murinae;
                                                                                                                                                                                                                                        Goridis C., Wille M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Euteleostomi;
               QF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus
                                 N
```

NEURITES, ETC

```
δÃ
                                   В
                                                      2
                                                                                                                                   Query Match
Best Local S
Matches 75
                                                                                                                                                                            CARBOHYD
CARBOHYD
                                                                                                                                                                                                                        DISULFID
DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                    DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                        CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam;
Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro;
InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                         CARBOHYD
                                                                                                                                                                                                     CARBOHYD
                                                                                                                                                                                                               CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This
                                                                                                                                                                    CARBOHYD
                                                                                                                                                                                                                                                                               DOMAIN
                                                                                                                                                                                                                                                                                          DOMAIN
                                                                                                                                                                                                                                                                                                                           DOMAIN
                                                                                                                                                                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                                DOMAIN
                                                                                                                                                                                                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                                                                                                                                      DOMAIN
                                                                                                                                                                                                                                                                                                                                                                               DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                        TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                              Cell adhesion; Glycoprotein;
Immunoglobulin domain; Alterr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        + +
                                   222
                                                     44 NVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVV-----
              96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALTERNATIVE PRODUCED BY ALTERNATIVE SPLICING.

N-CAM ARE PRODUCED BY ALTERNATIVE SPLICING.

SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.

SIMILARITY: CONTAINS 5 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAIN.

SIMILARITY: CONTAINS 2 FIBRONECTIN TYPE III-LIKE DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  erPro; IPRO03961; FN_III.
erPro; IPRO03006; Ig_MHC.
erPro; IPRO03598; Ig_c2.
n; PF00041; fn3; 2.
n; PF00047; fg; 5.
er; SM0006; FN3; 2.
er; SM00408; IGc2; 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBCELLULAR LOCATION: Type I membrane protein. ALTERNATIVE PRODUCTS: THE DIFFERENT TISSUE-SPECIFIC
TQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISL : : | : | | | | | : : :: :: | :: |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation European Bioinformatics Institute. There are no restrictions on if
                              NATANLGQSVTLVCDADG-----FPEPTM-----SWTKDGEPIENEEEDERSRSSVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MGI:97281;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   X06328;
X07195;
X07244;
X15051;
X15052;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A29673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X07200; CAA30177.1;
Y00051; -; NOT_ANNO
                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        non-profit institutions as long
                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; -; NOT_ANNOTATED_CDS.
; CAA39641.1; -.
; CAA30173.1; -.
; CAA30130.1; -.
; CAA33150.1; -.
; CAA33150.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IJMSNL
                                                                                                                                   ÃĄ;
                                                                                                                                   1076
A; 119351
                                                                                                                                                                                                                                                                                                                                                                                                                          1115
                                                                                                                                                        1729
103
196
295
393
487
596
692
1156
1156
189
288
388
480
288
316
480
222
316
                                                                                       15.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Alternative
                                                                             45;
                                                                                                                               N-LINKED (GLCNAC...) (POTENTIAL
N-SSING (IN ISOFORM N-CAM 140).
                                                                                                                                                                                                                                                                                                                     CYTOPLASMIC (POTENTIAL).
IG-LIKE C2-TYPE DOMAIN 1.
IG-LIKE C2-TYPE DOMAIN 2.
IG-LIKE C2-TYPE DOMAIN 3.
IG-LIKE C2-TYPE DOMAIN 4.
IG-LIKE C2-TYPE DOMAIN 4.
IG-LIKE C2-TYPE DOMAIN 5.
                                                                                                                                                                                                                                                                            FIBRONECTIN TYPE-III |
FIBRONECTIN TYPE-III |
FIBRONECTIN TYPE-III |
HEPARIN-BINDING (POTEN
HEPARIN-BINDING (POTEN
                                                                                                                                   MW;
                                                                                                                                                                                                           PROBABLE.
PROBABLE.
N-LINKED
                                                                                                                                                                                                                                           PROBABLE. PROBABLE.
                                                                                       Score 283.5; DB Pred. No. 5.4e-1
                                                                                                                                                                                                                                                                  PROBABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Transmembrane; Repeat;
                                                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                    EXTRACELLULAR
                                                                                                                                                                                                                                                                                                                                                                                                                        NEURAL CELL ADHESION MOLECULE,
                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                            splicing; Signal; Heparin-binding.
                                                                                                 DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       as its content
                                                                                                                                                                                                                                                                                                                                                                                                   (POTENTIAL)
                                                                                                                                                                                                                                                                            (POTENTIAL).
                                                                           Indels
                                                                                                Length 1115;
                                                                                                                                                               ) (POTENTIAL).
) (POTENTIAL).
) (POTENTIAL).
) (POTENTIAL).
) (POTENTIAL).
                                                                                                                                                       (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ıs
                                                                           41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a collaboration
                                                     LLSNTQ
                                                                                                                                                                                                                                                                                                                                                                                                                        LARGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        윢
                                                                           Gaps
           155
                                268
                                                     95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      no
                                                                           7;
```

```
ALD DEFINITION OF THE PROPERTY OF THE PROPERTY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
NCA1_CI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  D)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Brackenbury R., Edelman G.m.,
Brackenbury R., Edelman G.m.,
"Neural cell adhesion molecule: structure, immunoy
"Neural cell surface modulation, and alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHICK

CHICK

WCA1_CHICK

STANDARD;

PRT; 1091 AA.

P13590; Q90919; Q90918;

01-JAN-1990 (Rel. 13, Created)

15-JUL-1998 (Rel. 36, Last sequence update)

01-MAR-2002 (Rel. 41, Last annotation update)

Neural cell adhesion molecule, large isoform precursor (N-CAM 180)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. (726 AA FORM).
MEDLINE-87092340; PubMed-3467341;
Hemperly J.J., Edelman G.M., Cunningham B.A.;
"CDNA clones of the neural cell adhesion molecule membrane-spanning region consistent with evidence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Neural Cell Contains: N-CAM [140].
[Contains: N-CAM [140].
Gallus gallus (Chicken).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Neognathae; Galliformes; Phasianidae; Phasianinae;
                 SEQUENCE OF 1-17 FROM N.A.
STRAIN=WHITE LEGHORN; TISSUE=Erythrocyte;
Sasner M., Covault J.;
                                                                                                                                                                                                                   SEQUENCE OF 1-17 FROM N.A. MEDLINE=93122797; PubMed=1478668; Colwell G., Li B., Forrest D., Br.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 810-1069 FROM N.A. MEDLINE-87033934; PubMed=3771645; Murray B.A., Owens G.C., Prediger Cunningham B.A., Edelman G.M.;
  Submitted
                                                                                                                                                                         gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     attachment via a phosphatidylinositol intermediate.", Proc. Natl. Acad. Sci. U.S.A. 83:9822-9826(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hemperly J.J., Murray B.A., Edelman G.M., Cunningham B.A.; "Sequence of a cDNA clone encoding the polysialic acid-rich cytoplasmic domains of the neural cell adhesion molecule N-cycor Natl. Acad. Sci. U.S.A. 83:3037-3041(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cunningham B.A., Hemperly J.J., Brackenbury R., Edelman G.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 1-175 FROM N.A., AND MEDLINE=87206190; PubMed=3576199;
                                                                                                                                            Genomics
                                                                                                                                                                                                                                                                                                                                                                           developmental
                                                                                                                                                                                                                                                                                                                                                                                                resulting from alternative mRNA splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9031;
                                                                                                                                                                                                    "Conserved
                                                                                                                                                                                                                                                                                                                                                                                                                                       "Cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=86206089; PubMed=3458261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 128-1091 FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     269
                                                                                                                                                                                                                                                                                                                                                   Cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RLIEGK-KGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTASNTIGQD-SQSIDLEFQYAPKLQGPVAVYTWEGNQVNITCEVFAYPSATISWFRDGQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCEASGDPIPSITWRTSTRNISSEEQDLDGHMVVRSHARVSS---LTLKSIQYRDAGEYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCIATGRPEPTVTWR----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DSSEVTIRNVDKNDEAEYVCIAENKAGEQDASIHLKVFAKPKITYVENQTAMELEEQVTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESLEFIL 495
                                                                                                                                                                                                                                                                                                                                                                                                surface modulation of the neural cell adhesion molecule ting from alternative mRNA splicing in a tissue-specific
                                                                                                                                                                                                                                                                                                                                       mental sequence.";
Biol. 103:1431-1439(1986).
                                                                                                                                      14:875-882(1992)
(AUG-1993) to the
                                                                                                                                                                                           regulatory elements in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Prediger E.A.,
EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AND PARTIAL SEQUENCE
                                                                                                                                                                                                                         Brackenbury
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Murray B.A., Prediger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AND PARTIAL SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----HISPKAVGFVSEDEYLEIQGITREQSGDYE
                                                                                                                                                                                                 the
                                                                                                                                                                                           promoter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Crossin K.L.,
                                                                                                                                                                                                                            ₽.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immunoglobulin-like
rnative RNA splicing.";
                                                                                                                                                                                              region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (N-CAM) lacking
                                                                                                                                                                                              of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-CAM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and
                                                                                                                                                                                              N-CAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              385
```

LARGE

```
entities requires a license agreement (See http://www.isb-sib.ch/announce, or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-CAM ARE PRODUCED BY ALTERNATIVE SPLICING.
SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
SIMILARITY: CONTAINS 5 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS.
SIMILARITY: CONTAINS 2 FIBRONECTIN TYPE III-LIKE DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           European
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBCELLULAR LOCATION: Type I membrane protein.
ALTERNATIVE PRODUCTS: THE DIFFERENT TISSUB-SPECIFIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FUNCTION: THIS PROTEIN NEURON-NEURON ADHESION, NEURITES, ETC.
                                 M21178;
M21179;
M21179;
M15929;
M15930;
M15931;
M15934;
L29437;
M15934;
L29437;
X04275;
X04275;
X70342;
Z12128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M15960;
M15922;
M15923;
M15924;
M21178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   M21178;
M21179;
M21180;
M15929;
M15930;
M15931;
M15932;
                                                                                                                                                                                                                                                                          M15932;
M15934;
L29437;
M15935;
M15939;
M15936;
M15936;
M15922;
M15922;
M15923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                M21179;
M21180;
M15929;
M15930;
M15931;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    M15935;
M15937;
M15938;
M15939;
M15861;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  M15933;
M15934;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    M15922;
M15923;
M15924;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L29437;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the Swiss Institute of Bioinformatics and the EMBL outstati
pean Bioinformatics Institute. There are no restrictions on
non-profit institutions as long as its content is in no
and this statement is not removed. Usage by and for commer
                                                                                                   AAB59957.
AAB59957.
                                                                                                                                                            AAB59957.
AAB59957.
                                                                                                                                                                                               AAB59957.
AAB59957.
AAB59957.
                                                                                                                                                                                                                                                      AAB59957.
                                                                                                                                                                                                                                                                                                                                                                                      AAB59959.
AAB59959.
AAB59959.
AAB59959.
AAB59959.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB59958.1;
AAB59958.1;
AAB59958.1;
                             CAA78113.1;
                                                                  AAB59957.1;
CAB51638.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB59959.
AAB59959.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB59958
AAB59958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB59958
AAB59958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB59958.
AAB59958.
AAB59958.
AAB59958.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB59958.
AAB59958.
                                                                                                                                                                                                                                                                                                                                 AAB59957.
AAB59957.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB59959.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB59959
AAB59959
                                                                                                                                                                                                                                                                                               AAB59957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB59959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB59959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB59959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB59959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB59958
                                                                                                                                                                                                                                                                                                                                                                        AAB59959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB59958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB59958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB59958.1;
AAB59958.1;
                                                                                JOINED.
                                                                                                                                                                                                                                                                                                                                                                JOINED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IS A CELL ADHESION MOLECULE, NEURITE FASCICULATION, OUTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Usage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CULE INVOLVED
OUTGROWTH OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FORMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL outstation
                                                                                                         for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IN
RESULT 15
NCA1_RAT
                                                                          g
                                                                                                           δÃ
                                                                                                                                                  뫄
                                                                                                                                                                                    Š
                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                              2
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R InterPro; IPR003361; FN_III.

R InterPro; IPR003006; Ig_MHC.
R InterPro; IPR003006; Ig_C2.
R InterPro; IPR003500; Ig_like.
R Pfam; PF00041; fn3; 2.
R Pfam; PF00047; ig; 5.
R Pfam; PF00047; ig; 5.
R Pfam; SMO0500; FN3; 2.
R SMART; SM00400; IG_like; 1.
R SMART; SM00408; IGC2; 4.
W Cell adhesion; Glycoprotein; Transmembrane; Repeat; W Cell adhesion; Glycoprotein; Transmembrane; Rights Cell adhesion; Glycoprotein; Transmembrane; Repeat; W Cell adhesion; Glycoprotein; Transmembrane; Repeat; W Cell adhesion; Glycoprotein; Transmembrane; Rights Cell adhesion; Glycop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VARSPLIC
VARSPLIC
VARSPLIC
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
DISULFID
DISULFID
DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CARBOHYD
CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TRANSMEM
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
                                                                  435 VISWFRDGQLLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESSEFIL
                                                                                                                                                                                                                           316
                                                                                                                                                                                                                                                                144
                                                                                                                                                                                                                                                                                            256 QEDNEEKYSFNYDGSELIIKKYDKSDEAEYICIAENKAGEQDATIHLKYFAKPKITYYEN
                                                                                                                                                                                                                                                                                                                                                                            214 VRARQSTM----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HSSP; Q13740; 1KJC
                                                                                                                                                                                                                                                                                                                                         91
                                                                                                                                                                                                                                                                                                                                                                                                           31 VRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVVL
                                                                                                                                                                                                                   TAMELEDQITLTCEASGDPIPSITWKTSTRNISNEEKTLDGRIVVRSHARVSSLTLKEI
                                                                                                                                                                                                                                                                                                                       LSNTQTQYSIE------IQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISS 143
                                                                                                                                                                                                                                                        DISINEGNNISLTCIATGRPEPTYTW----RHISPKAY---GFVSEDEYLEIQGITREQ-
                                                                                                     EFQWYKDDKRLIEGK-KGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML
                                                                                                                                           QYTDAGEYVCTASNTIGQD-SQAMYLEVQYAPKLQGPVAYYTWEGNQVNITCEVFAYPSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                  SGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSA:|:|||; ; || ||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         710
710
730
34
1132
228
322
412
518
664
41
152
1161
139
329
426
329
426
327
423
331
531
544
442
331
544
764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1091
809
1070
                                                                                                                                                                                                                                                                                                                                                                        -NATANLSQSVTLACDADG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 711
722
1091
1091
1994
2994
3992
1595
1595
1592
1592
1899
1899
1899
1899
1899
1899
1899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               117415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HEPARN-BINDING (POTENTIAL).

HEPARN-BINDING (POTENTIAL).

BY SIMILARITY.

J (POTENTIAL).

N-LINKED (GLCNAC. .) (POTENTIAL).

STSPTSGLGTRANYGLITYTEVLLL -> TLGSPSTSSSFV

SILISAVILLIC (IN 726 AA ISOFORM).

MISSING (IN 1052 AA ISOFORM).
                                                                                                                                                                                                                                                                                                                                                                                                                                                52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOPLASMIC (POTENTIAL).

IG-LIKE C2-TYPE DOMAIN 1.

IG-LIKE C2-TYPE DOMAIN 2.

IG-LIKE C2-TYPE DOMAIN 3.

IG-LIKE C2-TYPE DOMAIN 4.

IG-LIKE C2-TYPE DOMAIN 4.

IG-LIKE C2-TYPE DOMAIN 5.

FIBRONECTIN TYPE-III 1.

FIBRONECTIN TYPE-III 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 279.5; DB 1;
Pred. No. 1.1e-14;
2; Mismatches 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CELL ADHESION MOLECULE,
```

EMBL; EMBL; EMBL;

EMBL;

EMBL; EMBL;

EMBL;

EMBL;

EMBL;

EMBL; EMBL; EMBL;

EMBL;

EMBL;

EMBL; EMBL;

EMBL; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL;

EMBL;

EMBL; EMBL; EMBL; EMBL; EMBL; EMBL;

-FPEPTM-----TWTKDGEPIE

255

310

494

251

434

195

Length 1091; Indels

39;

Gaps

9;

90

EMBL; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL;

```
THE THE TERM THE TERM OF THE T
       DOMAIN
DOMAIN
DOMAIN
DOMAIN
DISULFID
                                                                                                                        DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                 TRANSMEM
                                                                                                                                                                                                                                                                                          DOMAIN
                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                  Cell adhesion; Glycoprotein;
Immunoglobulin domain; Alter;
                                                                                                                                                                                                                                                                                                                                                                                                                            SMART; SM00060; FN3; 2.
SMART; SM00408; IGc2; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; X06564; CAA29809.1; -. EMBL; M32611; AAA41679.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               use by non-profit institutions as long a modified and this statement is not removed. entities requires a license agreement (See )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation between Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                           DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
-!- SIMILARITY: CONTAINS 5 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS.
-!- SIMILARITY: CONTAINS 2 FIBRONECTIN TYPE III-LIKE DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
01-MAR-2002 (Rel. 41, Last annotation update)
Neural cell adhesion molecule, 140 kDa isoform precursor (N-CAM 140)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR003961; FN_III.
InterPro; IPR003006; Ig_MHC.
InterPro; IPR003598; Ig_c2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Small S.J., Haines S.L., Akeson R.A.;
"Polypeptide variation in an N-CAM extracellular immunoglobulin-like
fold is developmentally regulated through alternative splicing.";
Neuron 1:1007-1017(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 355-364 FROM N.A. MEDLINE=90166485; PubMed=2483093;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Small S.J., Shull G.E., Santoni M.-J., Akeson "Identification of a cDNA clone that contains sequence for a 140-kb rat NCAM polypeptide.", J. Cell Biol. 105:2335-2345(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=88059265;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCAM1 OR NCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NCAM-140)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBCELLULAR LOCATION: Type I membrane protein.
ALTERNATIVE PRODUCTS: THE DIFFERENT TISSUE-SPECIFIC FORMS
N-CAM ARE PRODUCED BY ALTERNATIVE SPLICING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: THIS PROTEIN IS A CELL ADHESION MOLECULE INVOLVED IN NEURON-NEURON ADHESION, NEURITE FASCICULATION, OUTGROWTH OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S00846; IJRTNC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NEURITES, ETC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PF00041; fn3; 2. PF00047; ig; 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eutheria; Rodentia;
         20
722
740
34
132
228
228
323
323
430
514
616
616
152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed=3680385;
         721
739
858
103
196
295
403
497
615
712
156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         institutions as long as its content
                                                                                                                                                                                                                                                                                                                                                                                  Alternative
CYTOPLASMIC (POTENTIAL).
IG-LIKE C2-TYPE DOMAIN 1.
IG-LIKE C2-TYPE DOMAIN 2.
IG-LIKE C2-TYPE DOMAIN 3.
IG-LIKE C2-TYPE DOMAIN 4.
IG-LIKE C2-TYPE DOMAIN 5.
IG-LIKE C2-TYPE DOMAIN 5.
FIBRONECTIN TYPE-III 1.
FIBRONECTIN TYPE-III 2.
HEPARIN-BINDING (POTENTIAL).
HEPARIN-BINDING (POTENTIAL).
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                   Transmembrane; Repeat;
                                                                                                                                                                                                                                                               POTENTIAL
                                                                                                                                                                                                                                                                                  EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                    NEURAL CELL ADHESION MOLECULE, 140 KDA
                                                                                                                                                                                                                                                                                                              [SOFORM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                           splicing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A
                                                                                                                                                                                                                                                                                                                                                                           Signal; Heparin-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Usage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         complete coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Уd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OF
FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     commercia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           way
```

```
Qy
                                          g
                                                             QΥ
                                                                                   밁
                                                                                                      Qy
                                                                                                                                                Qy
                                                                                                                             D;
                                                                                                                                                                       밁
                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                         Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                      CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                          DISULFID
DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                             CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                  CARBOHYD
                                                                                                                                                                                                                                                                                                             CARBOHYD
   452
                     258
                                          393
                                                               198
                                                                                    336
                                                                                                         163
                                                                                                                              276
                                                                                                                                                  103
                                                                                                                                                                       222
                                                                                                                                                                                         44
DGQLLPSSNYSNIKIYNTPSASYLEVTPDSENDFGNYNCTAVNRIGQESLEFIL
                    DDKRLIEGK-KGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIML 310
                                        EYICTASNTIGQD-SQSMYLEVQYAPKLQGPVAVYTWEGNQVNITCEVFAYPSATISWFR
                                                            DYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYK
                                                                                  PIPSITWRTSTRNISSEEKASWTRPEKQETLDGHMYVRSHARVSS---LTLKSIQYTDAG
                                                                                                       RNVDKNDEAEYYCIAENKAGEQDASIHLKYFAKPKITYVENQTAMELEEQYTLTCEASGD
                                                                                                                                                QNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGR 162
                                                                                                                                                                    NATANLGQSVTLVCDADGFPEPTMSWTKDGEPIENEEE----DDEKHIFSDDSSE--LTI 275
                                                                                                                                                                                        NVTVRQGESATLRCTION-RVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEI 102
                                                                                                                                                                                                             l Similarity 25.5
75; Conservative
                                                                                                                                                                                                                                                                             139
235
235
235
237
437
437
434
434
489
                                                                                                                                                                                                                                                                   AA;
                                                                                                                                                                                                                                                              189
396
490
490
222
316
316
348
434
430
489
94658
                                                                                                                                                                                                                       15.4%;
                                                                                                                                                                                                                                                                  ₩;
                                                                                                                                                                                                              50;
                                                                                                                                                                                                                                                                          BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
N-LINKED (GLCNAC.
                                                                                                                                                                                                                        Score 277.5;
Pred. No. 1.
                                                                                                                                                                                                                                                                  EA1A06A4EA0550F6
                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                        .2e-14;
                                                                                                                                                                                                                                  DB 1;
                                                                                                                                                                                                              132;
                                                                                                                                                                                                                                                                  CRC64;
                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                     (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                                                                                                                                                                                                            (POTENTIAL)
                                                                                                                                                                                                              37;
 505
                                                                                                                                                                                                              Gaps
                                                              257
                                                                                                        197
                                          451
                                                                                   392
                                                                                                                            335
                                                                                                                                                                                                              7;
```

Search completed: July 12, 2002, 00:45:52 Job time: 650 sec

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein -
             112
113
113
113
113
113
113
113
113
113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
      1665.5
1616.5
1427.5
1357.5
1275.5
1275.5
12930.5
930.5
930.5
338.5
338.5
338.5
338.5
338.5
290.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length: 0
length: 2000000000
         92.2

79.5

79.0

79.0

70.6

51.2

45.2

45.2

45.2

45.2

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

45.3

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1:
2:
3:
3:
4:
4:
5:
5:
7:
7:
110:
111:
112:
113:
114:
115:
116:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-700-397-3
1806
1 MKTIQPKMHNSISWAIFTGL.....RRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPTREMBL_19:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          July 12, 2002, 00:33:42; Search time 133.38 Seconds (without alignments) 446.171 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  562222 seqs, 172994929 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sp_organelle:*
sp_phage:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sp_rvirus:*
sp_bacteriap:*
sp_archeap:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sp_archea:*
sp_bacteria:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sp_mhc:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sp_mammal:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sp_invertebrate:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sp_human:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sp_fungi:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sp_vertebrate:*
sp_unclassified:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sp_rodent:*
sp_virus:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sp_plant:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
      DB
                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                  13 2 2 2 1
                                                                                                                                                  3 093242
3 09DG15
3 09DF61
002870
002869
3 09W6V2
3 09W6V2
3 09W6V1
                                                                                                                                                                                                                                                                                                                                                                                                             Q9P121
1 Q99PJ0
3 057596
                                                          Q9VMB2
P91670
Q9VCT4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        562222
                                             Q9p121 homo sapien
Q9p900 mus musculu
Q57596 gallus gall
Q93242 gallus gall
Q9df61 gallus gall
Q9df61 gallus gall
Q02870 gallus gall
Q02869 gallus gall
Q02869 gallus gall
Q02869 gallus gall
Q02860 gallus gall
Q02861 gallus gall
Q02861 gallus gall
Q02861 gallus gall
Q02862 gallus gall
Q02863 gallus gall
Q02864 drosophila
Q02866 gallus gall
Q02866 gallus ga
Q96sc3
Q96rw7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
```

4.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
44	245.5	248	250	250.5	250.5	254.5	255	255.5	259	260	260	260.5	260.5	260.5	261	261	265	268.5	269.5	272.5	273.5	278.5	279.5	282.5	284.5	285.5	287	287
	13.6	-					14.1	٠	14.3	14.4	14.4	14.4	14.4	14.4	14.5								15.5					
512	1065	467	795	1342	885	5198	359	838	7962	1395	604	500	500	496	1395	1031	1482	1496	484	1323	725	4162	725	605	467	603	1100	846
4	Α.	Ŋ	Ľ	Ų	Ŋ	S	5	13	4	ហ	4	ഗ				13	v	4	υī	13	13	ι ω	13	11	Ŋ	ഗ	13	13
Q96DN8	094898	Q9VMN7	0MA060	Q9GPP6	Q9VPZ6	076518	Q9V6C2	TWA06Ö	Q10465	Q9W213	<u> Q96СJ3</u>	Q961W0	Q9X2B7	Q9W260	044924	Q90YM2	Q9V4Y0	Q92626	Q26475	Q08476	073634	Q98918	073633	Q921P2	09VP08	Q9NKF5	057576	057577
homo		Q9vmn7 drosophila	Q90ym0 brachydanio	Q9gpp6 drosophila			O.	-	Q10465 homo sapien					Q9w260 drosophila	044924 drosophila	Q90ym2 brachydanio			chisto	allus o	073634 xenopus lae	allús o	073633 xenopus lae	Q921p2 mus musculu	Q9vp08 drosophila	rosophi	7576 cynops	057577 cynops pyrr

ALIGNMENTS

```
Qу
                                            Db
                                                                                                                                                               Qy
                                                                                              Matches
                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                       Q9P121;
Q9P121;
01-OCT-2000
01-OCT-2000
01-DEC-2001
                                                                                                                                                          Pfam; PF00047; ig; 3.
SMART; SM00408; IGc2; 2.
SMART; SM00410; IG_like; 1.
Immunoglobulin domain.
SEQUENCE 344 AA; 37971 MW;
                                                                                                                                                                                                                                                             Li G., Jin J., Tan X., Hu S., Yuan J., Qiang B.; "Cloning and identification of human neurotrimin full length cDNA."; Submitted (PEB-1999) to the EMBL/GenBank/DDBJ databases.

EMBL; AF126426; AAF37591.1; -.
                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                               Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                        InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                            NEUROTRIMIN
69 LNRSTILYAGNDKWCLDPRVVLLSNIQTQYSIEIQNVDVYDBGPYTCSVQTDNHPKTSRV 128
                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                       (TremBLrel. 15, Created)
(TremBLrel. 15, Last seq
(TremBLrel. 19, Last ann
                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                      92.2%;
95.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                            Score 1665.5; DB 4; Length 344; Pred. No. 7.4e-138; 3; Mismatches 10; Indels 3;
                                                                                                                                                             DA4D12C295ABBE3A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            344 AA
                                                                                            ω
••
                                                                                         Gaps
                                                                                            ۲,
```

```
RESULT
Q99PJ0
                             Qγ
                                                                                                                            δÃ
                                                                                                                                                                                Db
                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                           D,
                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALD DATE OF THE PROPERTY OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; AF282980; AAK00276.1; -.
InterPro; IPR003599; Ig.
InterPro; IPR003598; Ig._c2.
InterPro; IPR003600; Ig_like.
InterPro; IPR003006; Ig_MHC.
Pfam; PF00047; Ig; 3.
SMART; SM00409; IG; 3.
SMART; SM00400; IG; 3.
SMART; SM00410; IG; Iike; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Cloning and expression of mouse nervous system.";
Submitted (JUN-2000) +- ->
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q99PJO;
01-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-ICR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NEUROTRIMIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q99PJ0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         [mmunoglobulin
                                249
                                                                                 189
                                                                                                                                 189
                                                                                                                                                                                  129
                                                                                                                                                                                                                                      129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        129
                                                                                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                    69 LNRSTIPYAGNDKWCLDPRVVLLGNTQTQYSIEIQNVDVYDEGPYTCSVQIDNHPKTSRV
                                                                                                                                                                                                                                                                                                                                                                                                                                           12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity es 308; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                        9 LPWKCLVVVSLRLLFLYPTGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N
                                                                                                         QGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAV
                                                                                                                                                                                                           HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEI 188
                                                                                                                                                                                                                                                                                                                    LNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                           PSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASI 308
                                                                           QGITREQSGEYECSASNDVAAPVVPRVKVTVNYPPYFSEAKGTGVPVGQKGTLQCEASAV
                                                                                                                                                                             HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLQI 188
                                                                                                                                                                                                                                                                                                                                                                                                                                           ISWAIFTGLAALCLF----QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASI 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASI 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAV 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV
(JUN-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              344 AA; 37924 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TrembLrel. 17, Created)
(TrembLrel. 17, Last seq
(TrembLrel. 19, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chordata; Craniata; Vertebrata; Euteleostomi; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89.5%;
91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1616.5;
Pred. No. 1.5e
9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Jeon J.W., Kim K.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3ECC6D5EE6C5C17D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                neurotrimin gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .5e-133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 11; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٠.
ا
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lee S.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                developing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                           248
                                                                                                                            248
                                                                                                                                                                                                                                                                                 128
                                                                                                                                                                                                                                                                                                                                                                                        68
                                                                                                                                                                                                                                                                                                                                                                                                                                      89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ļ,
```

```
QΨ
                                                           B
                                                                                      Qy
                                                                                                                    Дb
                                                                                                                                               Qy
                                                                                                                                                                                  B
                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                        QΥ
 В
                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                β
                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AJ225897; CAA12649.1; -.
EMBL; AF292935; AA601878.1; -.
InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like.
InterPro; IPR003006; Ig_MHC.
Pfcam; PF00047; Ig; 3
SMART; SM00408; IGC2; 2.
SMART; SM00410; IGC1; 16; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CEPU OR CEPU-SE.

Gallus gallus (Chicken).

Gallus gallus (Chicken).

Craniata, Vertebrata; Euteleostomi;

Eukaryota; Metazoa; Chordata; Craniata, Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
NEURAL SECRETED GLYCOPROTEIN (CEPU-SE ALPHA 2 ISOFORM).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          057596
057596;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kim D., Moss D.J.;
Submitted (FEB-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (AUG-2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein CEPU-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Archosauria; Aves; Neognathae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Characterisation of CEPU-Se, a secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                      183
                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lodge A.P., McNamee C.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  309 MLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF 344
303 NASMILYG 310
                            305 NASIMLFG 312
                                                           243
                                                                                         245
                                                                                                                                                  185
                                                                                                                                                                                             125 TSRVHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDE 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                249 PSAEFQWFKDDKRLVEGKKGVKVENRPFLSKLTFFNVSEHDYGNYTCVASNKLGHTNASI 308
                                                                                                                                                                                                                                             63
                                                                                                                                                                                                                                                                            65
                                                                                                                                                                                                                                                                                                        w
                                                                                                                                                                                                                                                                                                                                       Çī
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
                                                                         ASAYPSAEFQWYKDDKRLIEGKKGYKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHT 304
                                                                                                                  TLEITGITREQSGETECSASNDVAAPVVQRVKVTVNYPPYISDAKSTGVPVGQKGILMCE
                                                                                                                                                 YLEIQGTTREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCE 244
                                                                                                                                                                             TSRVHLIVQVSPKITEISSDISINEGGNVSLTCIATGRPDPTITWRHISPKAVGFISEDE 182
                                                                                                                                                                                                                                          RVAWLNRSSILYAGNDKWCLDPRVVLLANTKTQYSIQIHDVDVYDEGPYTCSVQTDNHPK 122
                                                                                                                                                                                                                                                                       RVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPK 124
                                                                                                                                                                                                                                                                                                       QAKMQHPVSWVIFAGMAALLLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCSVDNRVT 62
                                                                                                                                                                                                                                                                                                                                    QPKMHNSISWAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVT 64
                                                         ASAVPSADFQWYKDDKRLAEGQKGLKVENKAFFSRLTFFNVSEQDYGNYTCVASNQLGNT
                                                                                                                                                                                                                                                                                                                                                                                                                                             ilin domain.
313 AA; 34
                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                             34482 MW;
                                                                                                                                                                                                                                                                                                                                                                               79.1%; Score 1428; DB 13; 85.4%; Pred. No. 4.4e-117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                  27; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Howard M.R., Reed J.E., Moss D.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                             99AD825CAE4A5347 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              isoform of the IgLON family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA
                                                                                                                                                                                                                                                                                                                                                                   18;
                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                  313;
                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                    242
                                                                                                                                                                                                                                                                                                                                                                  0;
```

```
RESULT
Q9DG15
ID Q5
AC Q5
AC Q5
DT 01
DT 01
DT 01
DT 02
CH GN CH G0
OC EL
OC A1
                                                                                                                                                                               Дb
                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                       Дb
                                                                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                          ODDGIS;
O1-MAR-2001 (TrEMBLrel. 16, Created)
O1-MAR-2001 (TrEMBLrel. 16, Last seq
O1-DEC-2001 (TrEMBLrel. 19, Last ann
CEPU-SE ALPHA 1 ISOFORM.
       Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; (
Archosauria; Aves; Neognathae;
                                                                                                                     Q9DGI5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (MAR-1998) to the EMBL/GenBank/DDBJ EMBL; AB011810; BA331514.1; ... InterPro; IPR003598; Ig_C2. InterPro; IPR003600; Ig_like. InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KIMURA Y., Shirabe K., Fukushima M., Takeshita M., Tanaka H.;
"CEPU-1: an Immunoglobulin Superfamily Molecule, Has Cell Adhesion
Activity and Shows Dynamic Expression Patterns in Chick Embryonic
Spinal Cord.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunoglobulin domain. SEQUENCE 344 AA; 37613 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1998
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       093242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Archosauria; Aves;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CEPU-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            093242;
                                                                                                                                                                               308
                                                                                                                                                                                                                                                                            188
                                                                                                                                                                                                     308
                                                                                                                                                                                                                             248
                                                                                                                                                                                                                                                    248
                                                                                                                                                                                                                                                                                                                          128
                                                                                                                                                                                                                                                                                                                                                128
                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                               89
                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                    æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4
                                                                                                                                                                             MILYGPGAVHDGNSGAWRRGSCAWLLALPLAQLARQF 344
                                                                                                                                                                                            IMLFGPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLKF
                                                                                                                                                                                                                          VPSADFQWYKDDKRLAEGQKGLKVENKAFFSRLTFFNVSEQDYGNYTCVASNQLGNTNAS
                                                                                                                                                                                                                                        VPSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNAS
                                                                                                                                                                                                                                                                                                                                     VHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEDTVTWRHISPKAVGFVSEDEYLE
                                                                                                                                                                                                                                                                         ITGITREQSGEYECSASNDVAAPVVQRVKVTVNYPPYISDAKSTGVPVGQKGILMCEASA
                                                                                                                                                                                                                                                                                                IQGITREQSGDYECSASNDVAAPYVRRVKYTVNYPPYISEAKGTGVPVGQKGTLQCEASA
                                                                                                                                                                                                                                                                                                                       VHLIVQVSPKITEISSDISINEGGNVSLTCIATGRPDPTITWRHISPKAVGFISEDEYLE
                                                                                                                                                                                                                                                                                                                                                                     WINRSSILYAGNDKWCLDPRVVLLANTKTQYSIQIHDVDVYDEGPYTCSVQTDNHPKTSR
                                                                                                                                                                                                                                                                                                                                                                                 WLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSR
                                                                                                                                                                                                                                                                                                                                                                                                                   ALPWRCLVVLCLRLLFLVPAGVPVRSGDATFPKAMDNVTVRQGESATLRCSVDNRVTRVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PF00047; ig; 3.; SM00408; IGc2; 2.; SM00410; IG_like; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   267;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ROM N.A.
Shirabe K.,
                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Neognathae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             79.0%;
79.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31.
                                                                     Last sequence update)
Last annotation update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1427.5;
Pred. No. 5.5
        Craniata; Vertebrata; Eutel; Galliformes; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Galliformes; Phasianidae; Phasiani
                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22CAA8F526A6B57E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                    315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5; DB 13;
.5e-117;
                                                                                                                   AΑ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AΑ
                                                                                                                                                                                                    344
                                                                    update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
      Euteleostomi;
idae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                            187
                                                                                                                                                                                                                                                                                                                                                                    127
                                                                                                                                                                                                                                                                                                                                                                                                                                         67
                                                                                                                                                                                                                          307
                                                                                                                                                                                                                                                 307
                                                                                                                                                                                                                                                                                                                      187
                                                                                                                                                                                                                                                                                                                                                                                           127
                                                                                                                                                                                                                                                                                                                                                                                                                   67
                                                                                                                                                                                                                                                                        247
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
```

```
ρy
                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                              δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                             묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S WE DER COX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                      Q9DF61;
Q9DF61;
01-MAR-2001
01-MAR-2001
01-DEC-2001
MEDLINE=20499204; PubMed=11042360;
Lodge A.P., Howard M.R., McNamee C.J., Moss D.J.;
"Co-localisation, heterophilic interactions and regulated
of IgLON family proteins in the chick nervous system.";
Brain Res. Mol. Brain Res. 82:84-94(2000).
                                                                                                                                                                  OBCAM
OBCAM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00047; 19; 3.
SMART; SM00409; IG; 3.
SMART; SM00408; IGc2; 3.
SMART; SM00410; IG_like;
                                                                                 SEQUENCE FROM N.A.
                                                                                                                              Archosauria;
                                                                                                                                           Eukaryota;
                                                                                                                                                      Gallus gallus (Chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases EMBL; AF292936; AAG01879.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Characterisation of CEPU-Se, protein CEPU-1.";
                                                                        TISSUE-BRAIN;
                                                                                                      NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lodge A.P., McNamee C.J., Howard M.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9031;
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunoglobulin
SEQUENCE 315
                                                                                                                                                                                                                                                                                               308
                                                                                                                                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                                             248
                                                                                                                                                                                                                                                                                                                                                                 248
                                                                                                                                                                                                                                                                                                                                                                                        188
                                                                                                                                                                                                                                                                                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                                                                                                                                                                                                             128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                             MILYG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SISWAIFTGLAALCLF---QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVA
                                                                                                                                                                                                                                                                                                                      IMLFG
                                                                                                                                                                                                                                                                                                                                                        VPSALFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNAS
                                                                                                                                                                                                                                                                                                                                                                                       ITGITREQSGEYECSASNDVAAPVVQRVKVTVNYPPYISDAKSTGVPVGQKGILMCEASA
                                                                                                                                                                                                                                                                                                                                                                                                   IQGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASA
                                                                                                                                                                                                                                                                                                                                                                                                                                    VHLIVQVSPKITEISSDISINEGGNVSLTCIATGRPDPTITWRHISPKAVGFISEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                               VHLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WINRSSILYAGNOKWCLDPRVVLLANTKTQYSIQIHDVDVYDEGPYTCSVQTDNHPKTSR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WINRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSR 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              {\tt ALPWRCLVVLCLRLLFLVPAGVPVRSGDATFPKAMDNVTVRQGESATLRCSVDNRVTRVA}
                                                                                                                                                                                                                                                                                                                                          VPSADFQWYKDDKRLAEGQKGLKVENKAFFSRLTFFNVSEQDYGNYTCVASNQLGNTNAS
                                                                                                                                                                            ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pro; IPR003006; PF00047; ig; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IPR003599;
                                                                                                                                                                         1 (TrEMBLrel.
1 (TrEMBLrel.
1 (TrEMBLrel.
A 1 ISOFORM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IPR003600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IPR003598;
                                                                                                                                                                                                                                                                                               312
                                                                                                                                                                                                                                                                                                                    312
                                                                                                                                          Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                              Aves;
                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA;
                                                                                                                              ; Chordata; Neognathae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34606 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       75.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ig_like.
Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ig.
                                                                                                                                                                                      16,
19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26;
                                                                                                                                                                                     Created)
Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1357.5; DB 1
Pred. No. 6.7e-111;
                                                                                                                              Craniata; Vertebrata; Euteleostomi; Galliformes; Phasianidae; Phasiani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ard M.R., Reed J.E., Moss D.J.; a secreted isoform of the IgLO
                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68C5D27F0DDC6FB2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                    344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 13;
                                                                                                                                                                                      update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IgLON family
                                                                                                                               Phasianinae;
                                 expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          w
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                       247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67
                                                                                                                                                                                                                                                                                                                                          307
                                                                                                                                                                                                                                                                                                                                                                 307
                                                                                                                                                                                                                                                                                                                                                                                                             247
                                                                                                                                                                                                                                                                                                                                                                                                                                    187
                                                                                                                                                                                                                                                                                                                                                                                                                                                           187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۲.
```

```
ACO
DIDIO
DI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
002870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                γç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DR DR DR DR DR DR DR DR DR SQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 246
                                                                                                                                                                                                                                   "Cloning and characterization of a neural cell recognition axons of the retinotectal system and spinal cord."; Eur. J. Neurosci. 9:1105-1116(1997). EMBL. Z94718; CABORS113.1; -. InterPro; TPRONGEO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-JBC-2001 (TrEMBLrel. 19, Last annotation updat
CHLAME, G9-ISOFORM PRECURSOR.

Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
            SEQUENCE
                                                        SIGNAL
                                                                                                          SMART;
                                                                                                                                 SMART;
                                                                                                                                                        Pfam; PF00047; ig;
                                                                                                                                                                                                       InterPro;
                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=97358596; PubMed=9215692;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       002870;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 002870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00047; ig; 3.
SMART; SM00409; IG; 3.
SMART; SM00408; IGc2; 3.
SMART; SM00410; IG_like; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro;
InterPro;
                                                                                                                                                                                    InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12 ISWAIFTGLAALCLF----QGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAW 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
les 246; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PSAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLĞHTNASI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QGITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HLIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ILYGPGAVHDSGNAASRAAAGLCLW--ATLLARLLLDF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MLFGPGAVSEVSNGTSRRAG--CVWLLPLLVLHLLLKF 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PVAEFQWFKEDTRLANGLEGVRIESKGRLSTLTFFNVSEKDYGNYTCVATNKLGNTNASI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGITREQSGEYECSAVNDVAVPDVRKVKVTVNYPPYISNAKNTGASVGQKGILQCEASAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HLIVQVPPQIVNISSDITVNEGSSVTLMCLAFGRPEPTVTWRHLSGKGQGFVSFDEYLEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LNRSTILYAGNDKWSIDNRVVILSNTKTQYSIKIHNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LNRSTILYAGNDKWCLDPRVYLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LPWRCLVVLCLRLLFLVPAGVPVRSGDATFPKAMDNVTVRQGESATLRCTVDDRVRRVAW
                                                                             SM00408; IGc2; 2.
SM00410; IG_like; 1
GPI-anchor; Immunog
                                                                                                                                                                          IPR003598; Ig_c2.
IPR003600; Ig_like.
IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IPR003600;
IPR003006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IPR003599;
IPR003598;
          334 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             344 AA; 37531 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                      25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       domain
  334
37288 MW;
                                                                          Immunoglobulin domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Ig_c2.
; Ig_like.
; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    32;
POTENTIAL.
CHLAMP, G9-ISOFORM.
1; 0B40A768D9609E77 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1275.5; DB 1
Pred. No. 1.2e-103;
32; Mismatches 53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           37FE6051CBF0E7B4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 13; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                           molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188
                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ψ
```

Дb Qy

17 20

LAALCLF-OGVPVRSGDATFFKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRSTILYAG

Conservative

56;

Indels

17;

Gaps

Ç

LRLLCLLPTGLPVRSVD--FTRGTDNITVRQGDTAILRCFVEDRSSKVAWLNRSGIIFAG

74 78

```
RESULT
OLD 2869
OLD TO 100
OLD TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 УŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
           Query Match
Best Local S
Matches 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         002869 PRELIMINARY; PKT; 330 cm.
002869;
01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
                                                                                                                                                                                                                                                 Pfam; PF00047; ig; 3.
SMART; SM00408; IGc2; 2.
SMART; SM00410; IG_like; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Bruemmendorf T. Spaltmann F., Treubert U.;
"Cloning and characterization of a neural cell recognition axons of the retinotectal system and spinal cord.";
Eur. J. Neurosci. 9:1105-1116(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gallus gallus (Chicken)
Eukaryota; Metazoa; Cho:
                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                      Brain; GPI-anchor; Immunoglobulin domain; Signal SIGNAL 1 28 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                  InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; Z94719; CAB08114.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=97358596; PubMed=9215692;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Archosauria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134
                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 WAIFTGLAALCLFQGVPVRSGDATFPKAMDNVTVRQGESATLRCTIDNRVTRVAWLNRST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G-TGRVDNGSVSLAVPLWLLAASLLCLLSK 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAVSEVSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WVL--GFFLFLFFQGLPVRSVD--FTRGTDNITVRQGDTAILRCFVEDRSSKVAWLNRSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EWYRDDTR-INSANGLEIKSTGSQSLLMVANVTEEHYGNYTCVAANKLGVTNASLYLYRP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EQSGKYECKAANEVASADVKQVRVTVNYPPTITESKSNEAATGRQALLRCEASAVPTPDF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VPPKISNISSDITVNEGSNYTLYCMANGRPEPYITWRHLTPTGKEFEGEEEYLEILGITR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IIFAGEDKWSLDPRVELEKRSPLEYSLRIQKVDVYDEGSYTCSVQTQHHPKTSQVYLIVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                350 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                               29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aves;
                                                                                                                                                350 C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Chordata; Craniata; Vertebrata; Euteleostomi; Neognathae; Galliformes; Phasianidae; Phasiani
                                  51.5%;
54.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52.4%; Score 946; DB 7; 55.2%; Pred. No. 8.9e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57;
Score 930.5; DB 7 Pred. No. 2.2e-73; 6; Mismatches 8:
                                                                                                                                    POTENTIAL.
CHLAMP, G11-ISOFORM.
0844A892878894D4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                            350;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4;
```

δÃ

79

```
Š
                                  밁
                                                      Qy
                                                                                     B
                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                      Matches 159;
                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                              Pfam; PF00047; ig; 3.
SMART; SM00408; IGc2; 2.
SMART; SM00410; IG_like; 1.
                                                                                                                                                                                                                                                                 InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gallus gallus (Chicken).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
*--h-campia: Aves; Neognathae; Galliformes; Phasianidae; Phasiani
                                                                                                                                                                                                                                                                                                            J. Cell Biol. 145:865-876(1999).
EMBL; AJ132999; CAB44446.1; -.
                                                                                                                                                                                                                                                                                                                                      "Neurotractin, A novel neurite outgrowth-promoting Ig-like protein that interacts with CEPU-1 and LAMP.";
                                                                                                                                                                                                                                                                                                                                                               Marg A., Sirim P., Spaltmann Rathjen F.G., Brummendorf T.;
                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=99264333; PubMed=10330412;
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bruemmendorf T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1999 (TrEMBLrel.
01-NOV-1999 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q9W6V2
130 LIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQ
                                                                                                                                                                                                                    [mmunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NTRA-L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9W6V2;
01-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NEUROTRACTIN-L.
                                  71
                                                         70
                                                                                   11
                                                                                                            11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314 PNPFPGPG-TGRVDNGSVSLAVPLWLLAASLLCLLSK 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                        NRSSIIFÄGSDKWSVDPRVSIATANRREYSLQIQDVDVTDDGPYTCSVQTQHTPRTMQVH 130
                                         NRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVH
                                                                                                     SISWAIFTGLAALCLFQGVPVRSGDATFP-KAMDNVTVRQGESATLRCTIDNRVTRVAWL
                                                                            SHQWLAAVLLGLCCLLPAGRLAAPGGDFPGAAADSLVVRKGDTAVLRCYLEDGASKGAWL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DTR-INSANGLEIKSTGSQSLLMVANVTEEHYGNYTCVAANKLGVTNASLYLYKRVLPTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLF------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQGITREQSGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YECKAANEVASADVKQVRVTVNYPPTITESKSNEAATGRQALLRCEASAVPTPDFEWYRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YECSASNDVAAPVVRRVKYTVNVPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNISSDITVNEGSNYTLVCMANGRPEPVITWRHLTPTGKEFEGEEEYLEILGITREQSGK 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDBGPYTCSVQTDNHPKTSRVHLIVQVSPKI 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EDKWSLDPRVELEKRSPLEYSLRIQKVDYYDEGSYTCSVQTQHHPKTSQVYLIVQVPPKI 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GPGAVSEVSNGTSRRAGCVWLLPLLVLHLLLK 343
                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                        AA;
                                                                                                                                                                                                                   domain
                                                                                                                                                                                                                                                                                                                                                                        Spaltmann F., Plagge A., Kauselmann G.,
                                                                                                                                                46.6%;
48.0%;
                                                                                                                                                                                                      37944 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12,
12,
                                                                                                                                   68;
                                                                                                                                                Score 842; DB 13;
Pred. No. 1.3e-65;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                    B0FA99F295FD8FA0 CRC64;
                                                                                                                                  Mismatches 102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phasianidae; Phasianinae;
                                                                                                                                Indels
                                                                                                                                                            Length
                                                                                                                                                            352;
                                                                                                                                                                                                                                                                                                                                                                          Buck F.
                                                                                                                                2
                                                                                                                               Gaps
                                                    129
                                                                              70
                                                                                                      69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         198
                                                                                                                               2;
```

```
밁
                              Ş
                                                                              Qy
                                                                                                         밁
                                                       Db
                                                                                                                                Qy
                                                                                                                                                            밁
                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                             b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                               InterPro; IPR003006; Ig_MHC Pfam; PF00047; ig; 2. SMART; SM00408; IGc2; 1. SMART; SM00410; IG_like; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1999 (TrEMBLrel. 12,
01-NOV-1999 (TrEMBLrel. 12,
01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q9W6V1;
                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                       Marg A., Sirim P., Sparumann
Rathjen F.G., Brummendorf T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-99264333; PubMed-10330412; Spaltmann F., Plagge A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.
190 VITRDQAGEYECSAENDVSVPDVKKVKVTVNSP 222
                     190 GITREQSGDYECSASNDVAAPVVRRVKVTVNYP 222
                                                                                                                                                                                                                                                                                                                                                               InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                 "Neurotractin, A novel neurite outgrowth-promoting Ig-like protein that interacts with CBBU-1 and LAMP.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NEUROTRACTIN-S.
                                                       131
                                                                                130
                                                                                                                                                                                                                                                                         EQUENCE 261 AA; 28
                                                                                                                                                                                                                                                                                                                                                      [nterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (MAR-1999) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=9031;
                                                                                                         71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              310
                                                                                                                                  70
                                                                                                                                                            1
                                                                                                                                                                                     1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 310 LNPPSTAQYGITGDAEVLFSCWYLVLTLSSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131
                                                                                                                                                                                                                                                                                                                                                                                       Cell Biol. 145:865-876(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10
                                                               LIVQVSPKIVEISSDISINEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSEDEYLEIQ 189
                                                                                                 NRSSIIFAGSDKWSVDPRVSIATANRREYSLQIQDVDVTDDGPYTCSVQTQHTPRTMQVH
                                                                                                                NRSTILYAGNDKWCLDPRVVLLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRVH 129
                                                                                                                                                     SHQWLAAVLLGLCCLLPAGRLAAPGGDFPGAAADSLVVRKGDTAVLRCYLEDGASKGAWL
                                                                                                                                                                             SISWAIFTGLAALCLFQGVPVRSGDATFP-KAMDNVTVRQGESATLRCTIDNRVTRVAWL
                                                  LTYQVSPKIFRISSDIVVNEGSNYTLVCLATGKPEPSISWRHISPSAKPFES-GQYLDIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SAEFQWYKDDKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIM 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GITRDQAGEYECSAENDYSVPDYKKVKVTVNFAPTIQELKSSGVMLGGNGLIRCEGAGVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LFGPGAVSEVSNGTSRRAGCVWLLPLLVLHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APVFEWYRGERKLISGQQGITIKNYSTRSLLTVTNVTEEHFGNYTCVAANKLGMTNASLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GITREQSGDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVP 249
                                                                                                                                                                                                                                                                                                                                                                          AJ132998; CAB44445.1; -.
                                                                                                                                                                                                                                                                                                                                      IPR003006; Ig_MHC
                                                                                                                                                                                                                                                                                                                                                     IPR003600;
                                                                                                                                                                                                                                                                                                                                                                 IPR003598;
                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                         28205 MW;
                                                                                                                                                                                                      33.2%; Score 599; DB 13; 52.6%; Pred. No. 1.7e-44; tive 45; Mismatches 54;
                                                                                                                                                                                                                                                                                                                                                 Ig_c2.
Ig_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                        80E74DFA658802F3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĄΑ
                                                                                                                                                                                                                                                                                                                                                                                                                                       Kauselmann G.,
                                                                                                                                                                                                          54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           databases
                                                                                                                                                                                                                                  Length 261;
                                                                                                                                                                                                          Indels
                                                                                                                                                                                                         2;
                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ή.
.
                                                   189
                                                                                                                                                        70
                                                                                                                                                                               69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     189
                                                                                                                                                                                                       ۲,
```

```
Addmartides P.G., Scherer S.E., Holt R.A., Evans C.A., Gocayne J.D., RA Addms M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D., RA Admartides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F., RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., RA Berandin R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D., RA Man K.H., Doyle C., Barter E.G., Helt G., Nelson C.R., Miklos G.L.G., RA Abril J.F., Agbayani A., An H.-J., Andrews Pfannkoch C., Baldwin D. RA Ballew R.M., Beau A., Basendale J., Bayraktaroglu L., Beasley E.M., RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., RA Bockova D., Botchan M.R., Bouck J., Brokstein P., Brottier P., RA Buttis K.C., Blasam D.A., Butler H., Cadleu E., Center A., Chandra I., RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P., RA Beeson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P., RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P., RA Glodek A., Gong F., Gorreil J.H., Gu Z., Guan P., Harris M., RA Hostin D., Houston K.A., Howland T.J., Hernandes J.R., Houck J., RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., IDegvam C., Ether R., Miller R., McDirec C., Kraft C., Kratiz S., Kulp D., Lai Z., Liang Y., Lin X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D., RA Melson D.R., Welson K.A., Nixon K., Nusskern D.R., Pacleb J.M., RA Nelson D.R., Welson K.A., Sunders R.D.C., Scheeler F., Shen H., RA Reinert K., Spradling A.C., Stapleton M., Skupski M.P., Smith T., Ra Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X., Wang S., Moodage T., Worley K.C., Wu D., Yang S., Yao Q.A., Weissenbach J., Weissenb
                                                                                                                                                               Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Farfan D., Frise E., George R., Gonzalez M., Guarin H., Li P., Liao G., Miranda A., Mungall C.J., Nungo J., Pacleb J., Paragas V., Park S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M., Celniker S.;
               InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like.
InterPro; IPR003006; Ig_MHC.
                                                                             Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AB003767; AAF56835.1; -- EMBL; AV060653; AAL28201.1; -- EMBL; AV060653; AAL28201.1; -- ETyBase; FBgn0039617; CG14521.
                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN=Y, CN BW SI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAY-2000 (TrEMBLrel 13,
01-MAY-2000 (TrEMBLrel 13,
01-DEC-2001 (TrEMBLrel 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pterygota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drosophila melanogaster (Fruit fly).
Eukaryota: Metazoa: Arthropoda: Tracheata; Hexapoda; Insecta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-DEC-2001 (TrEMBLrel. 19, CG14521 PROTEIN (GH08175P).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=20196006; PubMed=10731132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CG14521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ephydroidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q9VAR6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Neoptera; Endopterygota; Diptera;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophilidae; Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                            SP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               update]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brachycera;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Muscomorpha;
```

```
24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
Abril J.F., Agbayani A., An H.-J., Andrews Pfannkoch C., Baldwin I Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M. Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P., Burtis K.C., Busam D.A., Butler H., Cadleu E., Center A., Chandra Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P., de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M., Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dun Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann Posler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,
                                                                                                                                                                  Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D., Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F., George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X., Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D., Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.
                                                                                                                                                                                                                                                                                                                                                                          Pterygota;
                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                        Drosophila melanogaster (Fruit fly)
                                                                                                                                                                                                                                                                                                                                                                                                                                          CG11320 PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAY-2000
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9VMB2;
01-MAY-2000
                                                                                                                                                                                                                                                                        MEDLINE=20196006; PubMed=10731132;
                                                                                                                                                                                                                                                                                            STRAIN-BERKELEY
                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                            Ephydroidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q9VMB2
                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Immunoglobulin
SEQUENCE 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMART; SM00408;
SMART; SM00410;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 292 NYTCVASNKLGHTNASIMLF----GPGA------VSEVSNGTSRRAGCVWLLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    276 LKGARTSNGFASVSTASLESGSPGPEMLLDGPKYGITERRDGYRGVMLLVVRSFSPSDVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LLAMLMIL 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTATHTFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYHCVSTNSLGRAEGTLRLYEIKLHPGASASNDDHLNYIGGLEEAARNAGRSNRTTW-QP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAYLCIASNDVPPAVSKRVSLSVQFAPMVRAPSQLLGTPLGSDVQLECQVEASPSPVSYW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GDYECSASNDVAAPVVRRVKVTVNYPPYI-SEAKGTGVPVGQKGTLQCEASAVPSAEFQW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EGNNISLTCIATGRPEPTVTWRH-----ISPKAVGFVSEDEY----LEIQGITREQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HQDMHTWKLKISKLRESDRGCYMCQINTS--PMKKQVGCIDVQVPPDIINEESSADLAVQ 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNTQTQYSIEIQNVDYYDEGPYTCSVQTDNHPKTSRVHLI-VQVSPKIV--EISSDISIN 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DATFPKAMDNVTVRQGESATLRCTIDN-RVTRVAWLNRS--TILYAGNDKWCLDPRVVLL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EGEDATLTCKATGNPQPRVTWRREDGEMILIRKPGSRELMKVESYNGSSLRLLRLERRQM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DPEFIGFINNVTYPAGREAILACSVRNLGKNKVGWLRASDQTVLALQGRVVTHNARISVM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                       Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) (TremBLrel. 13,
) (TremBLrel. 13,
l (TremBLrel. 19,
                                                                                                                                                                                                                                                                                                                                                                                      Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                           Drosophilidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IGc2; 2.
IG_like;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA; 45291 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18.7%;
28.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۳.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 338.5; Db ),
Pred. No. 2.3e-21;
""omatches 147;
                                                                                                                                                                                                                                                                                                                                                         Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Last sequence update;
Last annotation update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -DDKRLIEGKKGVKVENRP----FLSKLIFFNVSEHDYG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EC0D9A20F7AE0255 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A
                                                                                                                                                                                                                                                                                                                                                                                                                                                        update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 413;
                                                                                      Chandra I.,
                                                                                                                                      E.M.,
                                                                                                                                                 . D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13;
```

Fleischmann

η W.,

Dunn

```
RESULT 13
P91670
B
                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Shive B.C., Siden Kianos I., Simpson M., Skupski M.P., Smith T.,
RA Spier E., Spradiing A.C., Stapleton M., Strong R., Sun E.,
RA Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Jang X.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.,
RT "The genome senuence of brosonbila melanocastor".

RT "The genome senuence of brosonbila melanocastor".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                        01-MAY-1997
01-MAY-1997
01-DEC-2001
             Drosophila melanogaster (Fruit fly).

Bukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Musc Ephydroidea; Drosophilidae; Drosophila.
                                                                                         KLG OR
                                                                                                          KLINGON.
                                                                                                                                                                                    P91670;
                                                                                                                                                                                                       P91670
                                                                                                                                                                                                                                                                                                  256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART; SM00408; IGc2; 2.
SMART; SM00410; IG_like; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FlyBase; FBgn0031837; CG11320.
InterPro; IPR003598; Ig_c2.
InterPro; IPR003600; Ig_like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "The genome sequence of Drosop: Science 287:2185-2195(2000). EMBL; AE003614; AAF52409.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00047; ig; 3
                                                                                                                                                                                                                                                                                                                          256 YKDDKRLIEGK-KGVKVEN-RPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASI 308
                                                                                                                                                                                                                                                                                                                                                                            196
                                                                                                                                                                                                                                                                                                                                                                                                               197
                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fmmunoglobulin doma
SEOUENCE 315 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33 SGDATFPKAMDNVTVRQGESATLRCTIDNRVT-RVAWL--NRSTILYAGNDKWCLDPRVV 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                       LRDSQLLQGGSYESVSVDHVFRIVMRITLRPITKRDFGEYICRAKNAMGQTDRII 310
                                                                                                                                                                                                                                                                                                                                                                                          GDYECSASNDVAAPVVRRVKVTVNYPPYISEAKGT-GVPVGQKGTLQCEASAVPSAEFQW
                                                                                                                                                                                                                                                                                                                                                                  GAYLCIASNGVPPTVSKRVMLVVNFAPTIWTRYDTIYVGLGQKLTLECITESQPASVNFW
                                                                                                                                                                                                                                                                                                                                                                                                                                         RSTGQNVTLTCSATGVPMPTITWRREEATPI-LISDDGDREVFSVEGQNLTLWQVQRSHM, 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INEGNNISLTCIATGRPEPTVTWRHISPKAVGFVSED---EYLEIQG-----ITREQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISHTEHRIWQLKIRDVQESDRGWYMCQINTD--PMKSQMGYLDVVVPPDIVDYQTSQDVV 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LLSNTQTQYSIEIQNVDVYDEGPYTCSVQTDNHPKTSRV-HLIVQVSPKIV-"EISSDIS 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AADPKFSGPINNSTVPVGRDALLTCVVHDLVSFKVAWLRVDTQTILSIQNHVITKNHRIS 78
                                                                                     KLINGON OR CG6669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                      (TremBLrel. 03, Created)
(TremBLrel. 03, Last seq
(TremBLrel. 19, Last ann
                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  domain.
AA; 35487 MW;
       Endopterygota; Diptera; ilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18.4%; Score 333; 31.9%; Pred. No. '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drosophila melanogaster.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               54;
                                                                                                                    Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4CC4DEAA45DA12B8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; DB 5;
4.7e-21;
                                                                                                                                                                                                 AA
                                                                                                                      update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125;
                       Brachycera; Muscomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11;
```

```
RESULT
Q9VCT4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                               Q9VCT4 PRELIMINARY;
Q9VCT4;
01-MAY-2000 (TrEMBLrel 13, C
01-MAY-2000 (TrEMBLrel 13, L
01-DEC-2001 (TrEMBLrel 19, I
KLG PROTEIN (LD10776P).
Adams M.D., Ceiniker S.E., Holt R.A., Evans C.A., Gocayne J.D., Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F., George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X., Frandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D., Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G., Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D., Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M., Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P., Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
                                                                                                                                                                             STRAIN=BERKELEY;
MEDLINE=20196006; PubMed=10731132;
                                                                                                                                                                                                                                                                Drosophila melanogaster (Fruit fly).

Bukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;

Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;

Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                       KLG OR CG6669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART;
SMART;
SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases. EMBL; U78177; AAB36950.1; -. FlyBase; FBgn0017590; klg. InterPro; IPR003961; FN III. InterPro; IPR003598; Ig_c2. InterPro; IPR003500; Ig_like.
                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                      NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            332 IMATR-----ANRHMLT---IRHIQQEDFGNYSCVADNSLGRSRKYMELSGRPGA 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Butler S.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             274 TVDMRLDVLYPPDIQVEKSWIHSG--EGFEAKLVCIVFADPVATVSWYQNSFPIQSTDRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         212 VRRVKVTVNYPPYISEAKG---TGVPVGQKGTLQCEASAVPSAEFQWYKD------DKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             [mmunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          157 ---YNLEISDLEPQDAGDYVCQISDKINRDQVHTVEILVPPSVRAIPTSGQLQARKGGPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95 QTQYSIEIQNVDVYDEGPYTCSVQTD-NHPKTSRVHLIVQVSPKIVEISSDISINEGNNI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36 ATFPKAMDNVTVRQGESATLRCTIDNRVTRV-AWLNRSTILYAGNDKWCLDPRVVLLSNT 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        n; PF00041; fn3; 1.77
n; PF00047; fg; 3.
n; PF00047; ig; 3.
RT; SM00060; FN3; 1.
RT; SM00410; IGC2; 2.
RT; SM00410; IG_like; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFG-PGA 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SLTCIATGRPEPTVTWRHIS--PKAVGFVSEDEYLEIQGITREQSGDYECSASNDVAAPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TLECKGSGNPVFSIYWTKKSGANKSTARIGDGPILTLEKLERQQAGVYQCTADNGVGDPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APFPLQRTHLPRRRRGHAGLPCQVENLGNFVLLWRRGTNVLTASNIMVTRDERVRLIDG- 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IPR003006; Ig_MHC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ray S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ΑA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17.1%;
28.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58565 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hiromi Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54;
                                                                                                                                                                                                                                                                                                                                                               Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 308.5;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B6C707A0A24806BC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.4e-18;
ches 127;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 528;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           153
```

10;

```
Ωy
                                                                                                       В
                                                                                                                                               Qy
                                                                                                                                                                                               B
                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                          DЪ
                                                                                                                                                                                                                                                                                                                                 ΩV
                                                                                                                                                                                                                                                                                                                                                                                   ₽
              Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Durbin K.J., Evangelista C.C., Ferriaz C., Ferriera S., Fleischmann W.,
RA Fosler C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Wei M.-H., Ibeywam C.,
RA Harris N.L., Havey D., Heiman T.J., Wei M.-H., Ibeywam C.,
RA Harris N.L., Houston K.A., Howaland T.J., Wei M.-H., Liai Z.,
RA Hostin D., Houston K.A., Howaland T.J., Wei M.-H., Liai Z.,
RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
RA Mount S.M., Noy M., Murphy B., Murphy L., Pacleb J.M.,
RA Reinert K., Remington K., Sunders R.D.C., Scheeler F., Shen H.,
RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J.,
RA Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Zheng X.H., Zhong W., Zhou X., Zhu X., Smith H.O.,
RA Zheng X.H., Zhong W., Zhou X., Zhu X., Smith H.O.,
RA Zheng X.H., Zhong W., Zhou X., Zhu X., Smith H.O.,
RT The genome sequence of Drosophila melanogaster.";
RI Science 287:2185-2195(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FlyBase; FBgn0017590; klg.
InterPro; IPR003961; FN_III.
InterPro; IPR003598; Ig_c2.
InterPro; IPR003006; Ig_MHC.
Pfam; PF00047; Iq; 3.
SMART; SM00060; FN3; 1.
SMART; SM00448; IGc2; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nunco J., Pacleb J., Paragas V., Park S., Phouanenavong Yu C., Lewis S.E., Rubin G.M., Celniker S.; Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases EMBL; AE003741; AAF56071.1; -. EMBL; AY060363; AAL25402.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Farfan D., Frise E., George R., Goralez M., Guarin H., Li P., Liao G., Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M., Celniker S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
332 DRRIMATR-----ANRHMLT---IRHIQQEDFGNYSCVADNSLGRSRKYMELSGRPGA
                                                                                                                                                                                   214 GPITLECKGSGNPVPSIYWTKKSGANKSTARIGDGPILTLEKLERQQAGVYQCTADNGVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EQUENCE 545 AA; 6
                                                                                                                                                    209
                                                                                                                                                                                                                               151 NNISLTCIATGRPEPTVTWRHIS--PKAVGFVSEDEYLEIQGITREQSGDYECSASNDVA 208
                                                                                                                                                                                                                                                                            158 DG----YNLEISDLEPQDAGDYYCQISDKINRDQVHTVEILVPPSVRAIPTSGQLQARKG
                                                                                                                                                                                                                                                                                                                       92 SNTQTQYSIEIQNVDVYDEGPYTCSVQTD-NHPKTSRVHLIVQVSPKIVEISSDISINEG
                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                                                                                                                                                                                  36 ATFPKAMD-NYTVRQ--GESATLRCTIDNRVTRV-AWLNRSTILYAGNDKWCLDPRVVLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                        DPVTVDMRLDVLYPPDIQVEKSWIHSG--EGFEAKLVCIVFADPVATVSWYQNSFPIQST 331
                                           DKRLIEGKKGVKVENRPFLSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFG-PGA
                                                                                                                                   APVVRRVKVTVNYPPYISEAKG---TGVPVGQKGTLQCEASAVPSAEFQWYKD-----
                                                                                                                                                                                                                                                                                                                                                                       ATLPRFLSRGHTYRAVVGDTLVLPCQVENLGNFVLLWRRGTNVLTASNIMVTRDERVRLI 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CN BW SP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60087 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16.9%;
28.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 306; DB 5;
Pred. No. 2.4e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D5E81D9E5574E9DE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches 125; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 545;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  32;
                                             315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                            213
                                                                                                                                                                                                                                                                                                                                                                                                                     91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12;
```

```
Qγ
                                                             В
                                                                                        8
                                                                                                                     DЬ
                                                                                                                                               Qy
                                                                                                                                                                              B
                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                               Ωy
                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                             Query Match
Best Local .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q96SC3 PRELIMINARY;
Q96SC3;
Q96SC3;
Q1-DEC-2001 (TrEMBLrel. 1
Q1-DEC-2001 (TrEMBLrel. 1
Q1-DEC-2001 (TrEMBLREL. 1
FIBULIN-6 (FRAGMENT).
                                                                                                                     1322
                                                                                                                                                                     1262 LILENVVLEDSGFYTCVANNAAGEDTHTVSLTVHVLPTFTELPGDVSLNKGEQLRLSCKA 1321
                                                                                                                                                                                                                              1217 TVNENSQATLPCVADGIPTPAI-------NWKKDN--VLLANLLGKYTAEPYGE 126
                                                                                                                                                                                                                                                                                                                                                                                EMBL; AJ
1422 NRKGVDIEISHRIRQLGNGSLAIYGTVNE-DAGDYTCVATNEAGVVERSMSL 1472
                                                          1382 YVKEPPVFKG-----DYPSHWIE-----
                                                                                                                                                                                                                                                                                                                                                                                         "Rostka G., Timpl R.;
"Partial sequence of fibulin-6 with a c-terminal region related to domain II and III of the fibulin family.";
Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases.
EMBL: AJ306906; CAC37630.1; -.
                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FIBL-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
TISSUE-MELANOMA;
                                                                                                                                                                                                102 --IQNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEISSDISINEGNNISLTCIA 159
                                                                                                                                                                                                                                                         46 TVRQGESATLRCTIDNRVTRVAWLNRSTILYAGNDKWCLDPRVVLLSNTQTQYSIE---- 101
                                                                                                                                                                                                                                                                                                           Local
                           GKKGVKVENRPFLSKL-----IFFNVSEHDYGNYTCVASNKLGHTNASIML
                                                                                                               TGIPLPKLTWTFNNNIIPAHFDSVNGHSELVIERVSKEDSGTYVCTAENSVGFVKAIGFV 1381
                                                                                  ----APVVRRVKVTVNYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIE 264
                                                                                                                                          TGRPEPTVTW---RHISPKAVGFVSEDEYLEIQGITREQSGDYECSASNDVA-----
                                                                                                                                                                                                                                                                                            87; Conserv
                                                                                                                                                                                                                                                                                                                                                                 2673 AA;
                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata;
Primates;
                                                                                                                                                                                                                                                                                                        16.1%;
29.8%;
                                                                                                                                                                                                                                                                                                                                                              291017 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19,
19,
                                                                                                                                                                                                                                                                                           36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
                                                                                                                                                                                                                                                                                                        Score 290.5;
Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                BEAEC30B8340E272 CRC64;
                                                         -PLGGNAILNCEVKGDPTPTIQW-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2673
                                                                                                                                                                                                                                                                                                     .3e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ã
                                                                                                                                                                                                                                                                                                                   DB 4;
                                                                                                                                                                                                                                                                                           106;
                                                                                                                                                                                                                                                                                         Indels 63;
                                                                                                                                                                                                                                                                                                                 Length 2673;
                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                          208
                                                                                                                                                                                                                                                                                        10;
```

Search completed: July 12, 2002, 00:45:04 Job time: 682 sec

```
Result
No.
                     a
                                                                                 o o
                                                                                                                                                                                                                                                                                                                                                                                        Database
                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run on:
    110
110
112
113
113
114
116
                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
   635.2
635.2
631.8
627.6
627.6
6012.4
6002.2
540.2
544.8
593.2
544.8
554.4
5528.4
471.2
                                                                                                                                                                                                                                                                                                                                                                                                                                              DB
BB
                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                         seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of.
                                                                                                                                                              Match
                                                                                                                                                                                                                                              hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                July 11, 2002, 21:28:00; Search time 2986.73 Seconds (Without alignments) 7650.623 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                        Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13736207 seqs, 6748477542 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-700-397-2
1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gb_est1:*
                                                                                                                                                                                                                                                                                                                                                                      em_estba:*
em_esthum:*
                                                                                                                                                                                                                                                                                                                em_htc:*
                                                                                                                                                                                                                                                                                                                                   em_estpl:*
                                                                                                                                                                                                                                                                                                                                                    em_estmu:*
                                                                                                                                                                                                                                                                                                                                                              em_estin:*
                                                                                                                                                                                                                                                                                       gb_est2:*
gb_htc:*
                                                                                                                                                                                                                                                                                                                          em_estro:*
                                                                                                                                                                                                                                                                                                                                            em_estov:*
                                                                                                                                                                                                                                            em_gss_pln:*
em_gss_vrt:*
                                                                                                                                                                                                                                                             em_gss_hum:*
em_gss_inv:*
                                                                                                                                                                                                                                                                              gb_gss:*
                                                                                                                                                              Length
 1015
1015
1039
1039
732
784
604
661
661
543
754
7688
953
                                                                                                                                                               DВ
                   6
01
01
01
01
01
6
                                                                                                         10
BM009450
B1548566
BG706987
BE263639
B1598759
AU080629
AI753140
BM423716
BB644996
                                                                              0 BI551784
0 BI549918
AW025115
AW117456
                                                                                                                AL533026
BE798585
BI913885
                                                                                                                                                              IJ
                                                                                                                                                                                       SUMMARIES
     AW025115 wu71h04 x

AW117456 xd92a06 x

BW009450 603629962

BI548566 603195502

BG706987 602672194

BE263639 601192064

BI598759 603245538

AU080629 AU080629

AI753140 cr05g10.x

BM423716 AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27472414
                                                                                          BI666583 603291469
AL533026 AL533026
BE798585 601581610
BI913885 603183295
BI551784 603197479
BI549918 603197476
BB644996 BB644996
                                                                                                                                                           Description
```

45	44	4.	42	41	40	. (c	ω ω	37	36	35	34	ω	32	L L	30	29	λ α	27	26	25	24	23	22	21	20	19	18
295	310.2	325	332		340.2	346	349.6	370	371	374.4	388.8	391.2	396.8	404.2	408.4	419.2	424.4	427.8	437.4	440	443.4	447.6	450	453	455	U	467.2
17.4																		25.3									27.6
764	602	329	579	336	478	346	425	389	705	376	754	688	533	557	806	683	426	655	440	548	456	553	849	522	979	524	479
10	9	0.1	9	9	10	9	10	9	10	9	10	9	10	10	9	9	9	10	9	9	9	10	10	10	10	9	9
BI752729	BB611718	F06205	BB644523	AI262562	H05429	AI951451	н87092	AA450107	BG704152	AI246488	BI550038	BB646531	BI341675	BM256660	AU051132	BB640070	AI332824	BI548049	AI318423	BE015245	AI369684	BE864555	BI755360	BI553032	BG261691	BE014142	AA843782
BI752729 603028343	BB611718	F06205 HSC10F041 n	BB644523	ak42f01.	H05429 v180h09.r1	AI951451 wx67b07.x	H87092 ys74g04.rl	AA450107 zx42d09.s	BG704152 602687364	AI246488 qil3ql2.x	BI550038 603192502	BB646531 BB646531	369186	0	AU05113	3B640070	AI332824 qp96e10.x	BI548049 603196558	AI318423 go53g09.x	BE015245 127482 MA	Ω	٠.	BI755360 603024964	.~	0237	125737 M	AA843782 aj18d10.s

0 0 0

0 0 0

ALIGNMENTS

REFERENCE AUTHORS RESULT BI666583 FEATURES COMMENT SOURCE ORGANISM KEYWORDS VERSION ACCESSION DEFINITION LOCUS TITLE JOURNAL source DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11787 row: j column: 18
High quality sequence stop: 742.
Location/Qualifiers Email: ggapbs-r@mail.nih.gov Tissue Procurement: Miklos Palkovits, cDNA Library Preparation: Michael J. Toshiyuki and Piero Carninci (RIKEN) Unpublished (1999)
Contact: Robert Strausberg, Ph.D. National Institutes of Health, Mammalian Gene Collection (MGC) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 865) B1666583 865 bp mrNA linear EST 12-SEP-2001 -03221469F1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:5310833 5', EST NIH-MGC http://mgc.nci.nih.gov/ Homo sapiens BI666583.1 GI:15580816 mRNA sequence. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) numan. /organism="Homo sapiens" /db_xref="taxon:9606" /clone="IMAGE:5310833" /clone_lib="NIH_MGC_96" /tissue_type="hypothalamus"
/lab_host="DHIOB"
/lab_host="DHIOB"
/note="Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcgag); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTTTTTTTVN-3', size-selected for average insert size 2.3 kb and . 865 M.D., Ph.D. Brownstein (NHGRI), Shiraki

```
Qy
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                 Qy
                                            KEYWORDS
                                                                                                                                                                        В
                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                            DЬ
                                  SOURCE
                                                                     ACCESSION
                                                                                             DEFINITION
                                                                                                                      AL533026
                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                 Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QΨ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                           VERSION
                                                                                                           Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local .
                                                                                                                                                                          714
                                                                                                                                                                                                 660
                                                                                                                                                                                                                          654
                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                            594
                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                               474
                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                      tggctttgtgagtgaagacgaa 681
                                                                                                                                                                                                                                                                     ATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAAATATTAGCCTCACCTG
                                                                                                                                                                                                                                                                                                                       CAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCCCAAA
                                                                                                                                                                      TGGCTTTGTGAGTGAAGACGAA 735
                                                                                                                                                                                                                     CATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGCGGT
                                                                                                                                                                                                                                 catagcaactggtagaccagagcctacggttacttggagacacatctctccc@aagcggt 659
                                                                                                                                                                                                                                                                                             attgtagagatttcttcagatatctccattaatgaagggaac-aatattagcctcacctg
                                                                                                                                                                                                                                                                                                                                     cagacagacaacccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                        TACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTCGGTG
                                                                                                                                                                                                                                                                                                                                                                                          lacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                          999aatgacaagtggtgcotggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCAGGAAAGAAAGAAAG-AAAAAAACCGAACCTGACAAAAAAGAAGAAAAAGAAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaagaagaaaaagaaaaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAAÇACAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACGGGGCTGGCTGTGTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACC
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                  Homo sapiens
                                            prime, mRNA sequence.
AL533026
AL533026.1 GI:127965
EST.
                                                                                           AL533026 LTI_FL015_Brn1 Homo
                                                                                                           AL533026
                                  numan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library." a 230 c 209 g 176 t
                                                        GI:12796519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38.9%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                        1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     658; DB 10;
No. 1.2e-84;
                                                                                                       ďď
                                                                                         sapiens
                                                                                                       mRNA
                                                                                        RNA linear EST 13-FEB-2001 CDNA clone CS0DN005YD20 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 865;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                              599
                                                                                                                                                                                                                                                                      653
                                                                                                                                                                                                                                                                                                                        593
                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                          533
                                                                                                                                                                                                                                                                                                                                                                                                                           473
                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
         Qy
                                                           γQ
                                                                                    В
                                                                                                           Qy
                                    Ď
                                                                                                                                      밁
                                                                                                                                                              γ
                                                                                                                                                                                       DЪ
                                                                                                                                                                                                               γ
                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                   γ
                                                                                                                                                                                                                                                                                                                                             Вр
                                                                                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
```

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Lo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                 949
                                                                                                                                                                                                                   450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                     390
                                                                                                                                                                                                                                                                                                                                                                                    330
                                                                                                                                                                                                                                                                                                                                                                                                                        767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           150 TTAGCCTCACCTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90 AAGTATCTCCCAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATA 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
les 806; Conser
agacetttecteteaaacteatettetteaatgtetetgaacatgactatgggaactae 1008
                                                                                                                                                                                                       TCCAGTGGTACAAGGATGACAAAAGAGCTGAAATCTCATTCACAGTTTGGTTATGATGGG
                                                                                                                                                                                                                                                 tccagtggtacaaggatgacaaaa------
                                                                                                                                                                                                                                                                                                                    ctcccaaagcggttggctttgtgagtgaagacgaatacttggaaaattcagggcatcaccc
                                               TCCCCCTGGGACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                 ggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagggtacaggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAGCAGTCAGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCGCGCCCCGTGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCCCAAAGCGGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCC
                                                                                                                                                                                                                                                                                                                                                                           GGAGAGTAAAGGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aagtateteeeaaaattgtagagatttetteegatateteeeattaatgaagggaacaata 586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacacatct 646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP 191 91006 EVRY cedex - France
Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 1015)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genoscope - Centre National de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="CSODN005YD20"
/clone_lib="LTI_FL015_Brn1"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue_type="Adult brain"
/note="Vector: pCMVSPORT 6; Site_1: NotI; 1st strand cDNA
/note="Vector: pCMVSPORT 6; Site_1: NotI; 1st strand cDNA
was primed with a NotI-oligo(dT) primer. Five prime end
enriched, double-stranded cDNA was digested with Not I and
cloned into the Not I and Eco RV sites of the pCMVSPORT 6
vector. Library was constructed by Life Technologies.
Contact : Feng Liang Life Technologies, a division of
Invitrogen 9800 Medical Center Drive Rockville, Maryland
20850, USA Fax : (1) 301 610 8371 Email :
fliang@lifetech.com URL :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               http://fulllength.invitrogen.com"
249 c 251 g 219 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38.1%;
                                                                  -gactgattgaaggaaagaaaggggtgaaagtggaaaac 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 645; DB 9
Pred. No. 8e-83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequencage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ٠٠
٢٠)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                    910
                                                                                                                                                                                                             509
                                                                                                                                                                                                                                                      910
                                                                                                                                                                                                                                                                                            449
                                                                                                                                                                                                                                                                                                                                                                           389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   706
                                                                                                                                                                                                                                                                                                                                                                                                                    826
                                                                                                                                                                                                                                                                                                                                                                                                                                                           329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           209
```

۲

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
BE798585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aggggaacaaagaatactttggggggaaa 1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gaaaggctgccgccaccaccaccaccaccaccagcaatggcaatggcaacaccggcagcaacca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atcagatatatacaaatgaaattagaagaaacacagcctcatggggacagaaatttgaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAAGGCTGCCGCCACCACCACCACCAACACACAGC-ATGGCAACACCGACAGCAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ggcgccgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acttgcgtggcctccaacaagctgggccacaccaatgccagcatcatgctatttggtcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCAGATATATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATTTGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGGG-ACAAAGAATACTTTGGGGGAAAA 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTTGCGTGGCCTCCAACAAGCTGGGCCACCACCAATGCCAGCATCATGCTATTTGGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGACCITTCCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTAC 689
                                                                                                                                                                                                                                                                                                                  High
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BE798585 1039 bp
601581610F1 NIH_MGC_7 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                  Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalla; Eutheria; Primates; Catarrhini; Hominidae, 1 (bases 1 to 1039)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA sequence.
BE798585
                                                                                                                                                                                                                                                                                                                                    Plate: LLCM779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BE798585.1 GI:10219783
                                                                                                                                                                                                                                                                                                                                                         cDNA Library Preparation: Ling Hong/Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can
               274
                                                                                                                                                                                                                                                                                                               quality sequence stop: 849
                                                                                                                                                                                                                                                                                                                                           through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov
      adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."

271 c 286 g 207 t 1 others
                                                                     /tissue_type="small cell carcinoma"
/cell_line="MGC3"
                                                                                                                                                                                                               /clone="IMAGE:3935955"
/clone_lib="NIH_MGC_7"
                                                                                                                                                                                                                                                /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                   .1039
                                                                                                                                                                                                                                                                                                                                  row: d column:
                                                                                                                                                                                                                                                                                                                                  04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cDNA clone
                                                                                                                                         pOTB7; Site_1: XhoI; Site_2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gene Collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mage:3935955 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        809
                                                                                                                                                                                                                                                                                                                                                              be
```

```
JOURNAL
COMMENT
                                                                      REFERENCE
AUTHORS
                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                          RESULT
BI913885
                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                   ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вb
                                                                                                                                                                         VERSION
                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                          951
                                                                                                                                                                                                                                                                                               725
                                                                                                                                                                                                                                                                                                                                                     665
                                                                                                                                                                                                                                                                                                                                                                                894
                                                                                                                                                                                                                                                                                                                                                                                                          605
                                                                                                                                                                                                                                                                                                                                                                                                                                    834
                                                                                                                                                                                                                                                                                                                                                                                                                                                               545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    294 caggtgcactattgacaaccgggtcacccgggttggcctggctaaaccgcagcaccatcct 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65
                                                                                                                                                                                                                                                                                                                        acctttcctctc
                                                                                                                                                                                                                                                                                                                                                               gtacaaggatgacaaaagactgattgaaggaa---agaaaggggtgaaagtggaaaacag
                                                                                                                                                                                                                                                                                                                                                                                                                   gggacaaaaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaaggtcaccgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgt 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9tcaggggactacgagtgcagtgcctccaatgacgtggccgcgcgccgtggtacggagagt 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     agcggttggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagca 713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cacctgcatagcaactggtagaccagagcctacggttacttggagacacatctctcccaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tcccaaaattgtagagatttcttcagatatctccattaatgaagggaacaatattagcct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aacgcagtacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctg 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctatgctgggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccca 413
                                                                                                                                                                                                                                                                                               ACCITITICCIC
                                                                                                                                                                                                                                                                                                                                                 GTACAAGGATGACAAAAGACTGATTGAAGGAACAGACAGGGGTGAACAGTTGGAAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                      GGGACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCAGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACCTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACGCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCGGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCCAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCGGTGCAGACAGCCAACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTATGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGTGCACTATTGACAACCGGGTCGCCCGGGTGGCCTGGCTAAACCGCAGCACCATCCT 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                656;
 Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technolc
                                                                                                                                                        BI913885.1
EST.
                                            Unpublished (1999)
                                                                                Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates; 1 (bases 1 to 870)
                                                                                                                                                                                                         BI913885
603183295F1 NIH_MGC_121
                                                   NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                            Homo sapiens
                                                                                                                                         human
                                                                                                                                                                                    BI913885
                                                                                                                                                                                                mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                             736
                                                                                                                                                                                                                                                                                                                        962
                                                                                                                                                                     GI:16178206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37.5%;
97.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 635.2; DB Pred. No. 2e-81;
                                                                                                                                                                                                           870
Homo
Technologies,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                       đđ
                                                                                                                                                                                                           sapiens cDNA clone
                                                                                              Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                                       mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13;
  Inc
                                                      Gene
                                                                                                Hominidae;
                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                      Collection (MGC)
                                                                                                                                                                                                         IMAGE:5247550 5',
                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1039;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                           950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            593
                                                                                                                                                                                                                                                                                                                                                                                                                                 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                           604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      653
                                                                                                                                                                                                                                                                                                                                                                                                      664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                184
```

```
В
                                                                                                                                                                                                                    Οy
                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ϋ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
                                       1578 gagaccttccggcccaagcgtggcgctgcgggcactttggtagactgtgccaccacggcg 1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1038 caccaatgccagcatcatgctatttggtccaggcgcgtcagcgaggtgagcaacggcac 1097
540 GAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTGGTAGACTGTGCCACCACGGCG
                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1398 ttttcccaaacgggaagaacacaggcacacccgggcttgggacccactgcaaggtgcatcgtg 1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1098 gtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgcacctgcttctcaa 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 A-TTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCTGCCGCCACCACCACCACCAAC 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 GTCCAGGAGGCAGGCTGCGTCTGGCTGCTGCTTCTGGTCTTGCACCTGCTTCTCAA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGTCAGCGAGGTGAGCAACGGCAC 60
                                                                                                                                                                                | cytygaacattctggagctggccatcccaaattcaatcagtccatagagacgaacagaat
                                                                                                                                                                                                                                                                             CAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTCTCTGCCCACAGAGTGCCCCCA
                                                                                                                                                                                                                                                                                                                     caacctctttggtgccagtgtgggcaagggctcagcctctctgcccacagagtgccccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaagtittaaaaaagaaattgaaaattgccttgcagatatttaggtacaatggagttttc 1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aacacagcotcatgggacagaaatttgagggaggggaacaaagaatactttggggggaaa 1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acaacagcaatggcaacaccgacagcaaccaatcagatatatacaaatgaaattagaaga 1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCAGTCCATAGAGACGAACAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                              TTTTCCCAAACGGGAAGAACACACACACCCCGGCTTGGACCCACTGCAAGCTGCATCGTG 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATATTTAGGTACAATGGAGTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACACAGCCTCATGGGACAGAAATTTGAGGGAGGGGAACAAAGAATACTTTGGGGGGAAA 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAACAGCAATGGCAACACCGACAGCAACCAATCAGATATATACAAATGAAATTAGAAGA 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             High quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plate: LLAM11624 row: m column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note-"Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: ECORV (destroyed); RNA source anonymous pool of ifetal brains, female age 20 weeks, female age 24 weeks, and male age 26 weeks. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.7 kb, insert size range 0.7-3.5 kb. Library is normalized and enriched for female age 1.7 kb. 1.15 kb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5247550"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone_lib="NIH_MGC_121"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 631.8; DB 10; Length 870;
Pred. No. 6.4e-81;
0; Mismatches 7; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 737.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                         1577
                                                                                                                                                                                                                                                                                                                                                 1517
   599
                                                                                                                                    539
                                                                                                                                                                                                                                                                             479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1:
```

밁 Ωy

```
Qy
                                                                   Вp
                                                                                             Q
            밁
                                                                                                                            ď
                                                                                                                                                       ρy
                                                                                                                                                                                         В
                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                          BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BI551784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Snoor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
1638
                                                                   179
                                                                                               121
                                                                                                                              119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                         59
                                                                                                                                                                                                                                                 Local Similarity
mes 658; Conserv
                                                                          aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                     ATCAGGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAAGAAGAACAAAGAAGAAGAAGA 178
                                                                                                                                         atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaagaagaagaaaaagaagaaga 120
                                                                                                                                                                                GTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACACAATCT 118
                                                                                                                                                                                               gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI), Sh
Toshiyuki and Piero Carninci (RIKRI)
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLAMI1899 row: m column: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         High quality sequence stop: 732.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 732)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /32 DP mRNA linear EST 05-SEP-2001 603197479F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:5277115 5', mRNA securence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI551784.1 GI:15439096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI551784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BI551784
                                                                                                                                                                                                                                                                                                                                         218
                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                       ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5277115"
/clone_lib="NIH_MGC_95"
                                                                                                                                                                                                                                                                                                                              /tissue_type="hippocampus"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                              37.1%;
97.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                           Score 627.6; DB 1 Pred. No. 2.7e-80;
                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                          DB 10;
                                                                                                                                                                                                                                              15;
                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                       Length 732;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (NHGRI), Shiraki
                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                           Gaps
                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 рe
                                                                                                                                                                                                                                             2;
```

```
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BI549918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atagcaactggtagaccagagcctacggttacttgg-agacacatctctcccaaagcggt 659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tggctttgtgagtga 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAAGACACATCTCTCCCAAAGCGG- 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCACCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGACAGACAANCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGCTTTGTGAGTGA 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCCTTACACCTGCTCGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cgapbs:r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI), Sh
Toshiyuki and Piero Carninci (RIKME)
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI549918 784 bp mRNA line 603194765F1 NIH_MGC_95 Homo sapiens cDNA clone mRNA sequence.
BI549918
                                                                                                                                                                                                                                                                                                                                                                                                                         NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 784)
                                                                                                                                                                                               High quality sequence stop:
                                                                                                                                                                                                                                    found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BI549918.1 GI:15437230
                                                                                                                                                                                                                     LLAM11692
                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5274161"
/clone_lib="NIH_MGC_95"
/tissue_type="hippocampus"
/lab_host="DH10B"
/note="Organ: brain; Vector: pBluescriptR (modified
pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcgag
); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTTTTTVN-3',
                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                row: b column:
                                                                                                                                                                                                 726.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMAGE: 5274161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST 05-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo
                                                                                                                                                                                                                                                                                                                                     Shiraki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
```

KEYWORDS SOURCE

EST

ACCESSION VERSION

sequence. AW025115 AW025115.

```
RESULT 7
AW025115/c
                                                                                                                                                                        В
                       DEFINITION
                                                                                                              밁
                                                                                                                                      8
                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                         Db
                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                         Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                          657
                                                                                                                                                                        663
                                                                                                                                                                                                      600
                                                                                                                                                                                                                                    604
                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                544
                                                                                                              723
                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                           484
                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                     424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacacatct 60
                                                                                                                                                                                                                                              attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctca-cctg
                                                                                                                                                                                                                                                                                                                                                                      | tacagcatcgagatccagaacgtggatgtgtatgacgaggggcccttacacctgctcggtg
                                                                                                                                       ggttggctttgtga
                                                                                                                                                                 CATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACCATCTCCCCCCAAAAGC
                                                                                                                                                                                  catagcaactggtagaccagagcctacggttacttggagacac---atctctcccaaaagc
                                                                                                                                                                                                                             A-TGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCACCCTG
                                                                                                                                                                                                                                                                                       CAGACAGACCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCCCAAA
                                                                                                                                                                                                                                                                                                          cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                            GGTTGGCTTCGCGA
                                                                                                                                                                                                                                                                                                                                                   TACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTCGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                               999aatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACGGGGCTGGCTGTGTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atcaggaaagaaagaaagaaaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACACAATCT
                                                                                                                                                                                                                                                                                                                                                                                                               GGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCAGGAAAGAAAGAAAG-AAAAAACCGAACCTGACAAAAAAAGAAGAAAAAAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   662;
    AW025115
wu71h04.x1
similar to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  size-selected for average insert size 2.5 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library a 211 c 184 g 155 t
604 bp mrNA linear EST 09-MAR NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:25252527 SW:NTRI_RAT Q62718 NEUROTRIMIN PRECURSOR;, mrNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36.2%;
98.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 612.4;
Pred. No. 3.8e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.8e-78;
6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            784;
                               EST 09-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                             662
                                                                                                                                                                                                                                                            599
                                                                                                                                                                                                                                                                                          603
                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                    543
                                                                                                                                                                                                                                                                                                                                                                                                               483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4:
```

```
맑
                                              Š
                                                                                        밁
                                                                                                                          20
                                                                                                                                                                      Дb
                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                      γQ
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                      Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                              1363
                                                                                                                                                                                                              1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1063 ggtccaggcgcgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctgg 1122
                                                                                                                                                                                                                                                                     1243 caaccaatcagatatatacaaatgaaattagaagaaacacagcctcatgggacagaaatt 1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1123
                                                                                                                                                                                                                                                                                                                                                 1183 acccgggaaaggctgccgccaccaccaccaccaccaccaacaggcaatggcaacggcag 1242
        244
                                                                                        304
                                                                                                                                                                      364
                                                                                                                                                                                                                                                    424
                                                                                                                                                                                                                                                                                                                                    484
                                                                                                                                                                                                                                                                                                                                                                                                        544 CTGCTGCCTCTTCTGGTCTTGCACATGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      604 GGTCCAGGCGTCAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGG 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
acacccggcttggacccactgcaagctgcatcgtgcaacctctttggtgccagtgtgggc
                                                                                                         ttgccttgcagatatttaggtacaatggagttttcttttcccaaacgggaagaacacagc
                                                                                TGAGGGAGGGGAACAAAGAATACTTTGGGGGGGAAAAGAGTTTTAAAAAAAGAAATTGAAAA 305
                                                                                                                                                                                         tgagggaggggaacaaagaatactttggggggaaaaaagttttaaaaaaagaaattgaaaa
                                                                                                                                                                                                                                              CAACCAATCAGATATATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                               ctgctgcctcttctggtcttgcacctgcttctcaaattttgatgtgagtgccacttcccc 1182
                                                                                                                                                                                                                                                                                                                            ACCCGGGAAAGGCTGCCGCCACCACCACCACCAACACACAGCAATGGCAACACCGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               602;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     High quality sequence stop: 465.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA Library Preparation: M. Bento Soares, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center

Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:

www.bio.llnl.gov/bbrp/image/lmage.html

Insert Length: 1662 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Insert Length: 1662 Std Err
Seq primer: -40UP from Gibco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumor Gene Index
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 National Cancer Institute, Cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 604)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of normalization. Library constructed by Bento Soares and M. Fatima Bonaldo. "
158 c 157 g 171 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Organ: kidney; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer, double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. mRNA source: 2 pooled kidneys. Library went through one round
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="IMAGE:2525527"
/clone_lib="NCI_CGAP_Kid3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35.5%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 600.8; DB 9
Pred. No. 1.8e-76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genome Anatomy Project (CGAP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ν.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 604;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                     1482
                                                                                                                      1422
  185
                                                                              245
                                                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                                                                                            425
                                                                                                                                                                                                                                                                                                                                                                                                            485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
```

Qy 밁 Ş

1105

625

Matches

612;

Conservative

0;

Mismatches

13;

Indels

۲.

Gaps

Similarity

1045 gccagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgagg 1104

agggcaggctgcgtctgctgcctcttctggtcttgcacctgcttctcaaattttga 1164 GCCCTGACCCTTGGAAAAGGTCCAGGCGCCCCTCAGCGAGGTGAGCAACGGCACGTCGAGG 566

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
AW117456/c
LOCUS
                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                           BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1483 aagggctcagcctctctgcccacagagtgcccccacgtggaacattctggagctggccat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCGGGCACTTTGGTAGACTGTGCCACCACCGCGTGTGTTGTGAAACGTGAAATAAAAA 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgcgggcactttggtagactgtgccaccacggcgtgtgttgttgtgaaacgtgaaataaaaa 1662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCAAATTCAATCAGTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCCaaattcaatcagtccatagagacgaacagaatgagaccttccggcccaagcgtggcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGGCTCAGCCTCTCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AW117456 770 bp mRNA linear EST 20 xd92a06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2605042 3' similar to SW:NTRL_RAT 062718 NEUROTRIMIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          High quality sequence stop: 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-remail.nih.gov
This clone is available royalty-free through LLNL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia; Eutheria;
1 (bases 1 to 770)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumor Gene Index
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AW117456.1 GI:6086040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRECURSOR ; , mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1666
                                                                                                           155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              primer: -40UP from Gibco
                                                                                                       from the same 3 libraries. The pools consisted of 1.M.A.G.E. clones 297480-302087, 682632-687239, 726408-728711, and 729096-731399. Subtraction by B Soares and M. Fatima Bonaldo. "
                                                                                                                                                                                                    /note-"Organ: pooled; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (fetal lung NbHL19W, testis NHT, and B-cell NCI_CGAP_GCB1) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified CDNAs from pools of 5,000 clones made
                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                            /clone_lib="Soares_NFL_T_GBC_S1"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="IMAGE:2605042"
35.0%;
97.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primates;
                                                                                                     195 g
Score 593.2; DB 9;
Pred. No. 2.1e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hominidae;
                   Length
                     770;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contact the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST 20-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo.
                                                                                                                                                by Bento
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125
```

```
RESULT
BM009450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                     FEATURES
                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ωy
                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DЪ
                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                             AUTHORS
                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1645 tgaaacgtgaaataaaaaagagcaaaa 1670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           565
                                                                                                                                                                                                                                                                                                                                                                                                                                                 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATTCTGGAGCTGGCCATCCCAAATTCAATCAGTCCATAGAGACGAACAGAATGAGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cattctggagctggccatcccaaattcaatcagtccatagagacgaacagaatgagacct 1584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaacgggaagaacacagcacacccggcttggacccactgcaagctgcatcgtgcaacctc 1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tttggtgccagtgtgggcaagggctcagcctcttgcccacagagtgcccccacgtggaa 1524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               taaaaaagaaattgaaaattgccttgcagatatttaggtacaattggagtttttcttttccc 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cctcatgggacagaaatttgagggagggaacaaagaatactttggggggaaaaaaagttt 1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    caatggcaacaccgacagcaaccaatcagatatatacaaatgaaattagaagaaacacag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAACGTGAAATAAAAAGAGCAAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTCTCTGCCCACAGAGTGCCCCCACGTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAACGGGAAGAACACAGCACACCCGGCTTGGACCCACTGCAAGCTGCATCGTGCAACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAAAAAAGAAATTGAAAATTGCCTTGCAGATATTTAGGTACAATGGAGTTTT\TTTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTCATGGGACAGAAATTTGAGGGAGGGGAACAAAGAATACTTTGGGGGGAAAAGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAATGGCAACACCGACAGCAACCAATCAGATATATACAAATGAAATTAGAAGAAACACAG
                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 661)
                                                                                                                                                                               Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                         NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                            603629962F1 NIH_MGC_41 Homo sapiens cDNA clone
                                                                                                              CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                      Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                   Unpublished (1999)
                                                                                                                                                                                                                                                                                                                        EST
                                                                                                                                                                                                                                                                                                                                  BM009450
BM009450.1 GI:16523804
                                                                                                                                                                                                                                                                                                                                                          mRNA sequence.
                                                                                          Plate: LLCM1921 row: 1 column: 16
                                                                                                        http://image.llnl.
                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                             quality sequence stop: 659
  /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5443743"
/clone_lib="NIH_MGC_41"
                                                                Location/Qualifiers
                                                                                                        .gov
                                                                                                                                                                                                                                                                                                                                                                                  661 bp
                                                                                                                                                                                                                                                                                                                                                                                  mRNA
                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                    EST 30-OCT-2001
IMAGE:5443743 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  267
                                                                                                                             Ьe
ACCESSION
                                               BI548566
                                                                                                                       δÃ
                                                                                                                                                   g
                                                                                                                                                                         Ş
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                            QУ
                                                                                                                                                                                                                                                                                                                                                     뮰
                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ŋ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                       DEFINITION
                                    Locus
                                                             RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                           1223
                                                                                                                                                                                                                           1164
                                                                                                                         1281 a 1281
                                                                                                                                                                                                                                                                                                                                                                              1017
                                                                                                                                                                                                                                                                                                                             1063
                                                                                                 661
                                                                                                                                                   601
                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                            1104
                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                             957
                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          بسو
                                                                                                 A 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            625;
mRNA sequence.
BI548566
                   BI548566 580 bp r 603189502F1 NIH_MGC_95 Homo sapiens
```

```
657 ggttggctttgtgagtgaagacgaatacttggaaattcaggggcatcacccgggagcagtc 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                         ag-caatggcaacaccgacagcaacc-aatcagatatatacaaatgaaattagaagaaac 1280
                                                                                                                                     atgtgagtgccacttccccacccgggaaaggctgccgccaccaccacc-accaccaaccacac 1222
                                                                                                                                                                                                                 GAGGCAGCTGCGTCTGGCTGCTCTTCTGGTCTTGCACCTGCTTCTCAAATTTTG
AGCCAATGGCAACACCGACAGCAACCAAATCAGATATATACAAATGAAATTAGAAGAAAC
                                                                                                          ATGTGAGTGCCACTTCCCCACCCGGGAAAGGCTGCCGCCACCACCGACCACCAACAACAAC
                                                                                                                                                                                                                                               9agggcaggctgcgtctggctgcctcttctggtctttgcacctgcttctcaaattttg 1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCCCCaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgt 1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caaggatgacaaaagactgattgaaggaaaggaaagggtgaaagtggaaaacagaccttt 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99tcaccgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtggg 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCCTGACCCCTTGGAAAGGTCCAGGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGGAACTACACTTGCGT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acamaaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggta 896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 60
                                                                                                                                                                                                                                                                                                                                                                                                                            GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGAAGTGAAAACTAC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Organ: skin; Vector: pOTB7; Site_1: XhOI; Site_2: ECORI, CDNA made by oligo-dT priming. Directionally clone into ECORI/XhOI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /tissue_type="amelanotic melanoma, cell line"
/lab_host="DH108 (phage-resistant)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32.4%;
94.6%;
                                                                                                                                                                                                                                                                                                                                                       -gytccaggcgccgtcagcgaggtgagcaacggcacgtcgag 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 549; DB 10;
Pred. No. 4.2e-69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 661;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1062
                                                                                                          600
                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cloned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
```

mRNA cDNA clone

linear

IMAGE: 5260753

EST 05-SEP-2001 1:5260753 5',

BI548566.1

GI:15435878

```
Ş
                                             Дb
                                                                  Qy
                                                                                                B
                                                                                                                        QУ
                                                                                                                                                     В
                                                                                                                                                                              Qy
                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                              ρb
                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                          Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
source
                                                                        379
                                                                                                 250
                                                                                                           319 acccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgc
                                                                                                                                                 190 AACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAGGTGCACTATGGACAACCGGGTC
                                                                                                                                                                                                       130 GTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACA
                                         310 CTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAACGCAGTACAGCATCGAGATCCAG
                                                                                                                                                                  259 aacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtc
                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                 Local Similarity
les 568; Conserv
                                                       ctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccag
                                                                                                                                                                                                                        gtetettecaaggagtgeeegtgegeageggagatgeeacetteeceaaagetatggae-
                                                                                           ACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCTGGGAATGACAAGTGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tissue Procurement: Miklos Palkovits, M.D., Ph.D. cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki Toshiyuki and Piero Carninci (RIKEN) cDNA Library Arrayed by: The I.M.A.G.E. Consortiu (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mammalia; Butheria; Primates; Catarrhini; Hominidae: Homo 1 (bases 1 to 580)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  http://image.llnl.gov
Plate: LLAM11657 row: d column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 300)
NIH-MGC http://mgc.nci.nih.gov/.
NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    High quality sequence stop: 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         172
                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             through the I.M.A.G.E. Consortium/LINL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="NIH_MGC_95"
/tissue_type="hippocampus"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5260753"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                    32.2%;
99.3%;
                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                    Score 544.8; DB 1
Pred. No. 1.7e-68;
                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02
                                                                                                                                                                                                                                                                                                                                                                                                DB 10;
                                                                                                                                                                                                                                                                                                                                                                       2;
                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                Length 580;
                                                                                                                                                                                                                                                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                  438
                                       369
                                                                                             309
                                                                                                                     378
                                                                                                                                                 249
                                                                                                                                                                           318
                                                                                                                                                                                                        189
                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                     2;
```

Qy ф

55

Conservative

0;

Mismatches

7.6e-68; 3;

Indels

ω,.

Gaps

u .

Length

. 633;

61 атсаудааадааадааадааадааааассуаасстуасаааааадаадаадаадаадаада 120

GTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACACACAATCT 114

```
KEYWORDS
SOURCE
                                                                                                     ORIGIN
                                                                                                                      BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
BG706987
                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
Query Match
Best Local Similarity
Matches 575; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          489 GATATCTCCATTAATGAAGGGAACAATATTAGCCTCACCTGCATAGCAACTGGTAGACCA 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gagcctacggttacttggagacacatctctcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gatateteeattaatgaagggaacaatattageeteacetgcatageaactggtagacea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGCCTACGGTTACTTGGAGACACATCTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLAM10676 row: 1 column: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tissue Procurement: Miklos Palkovits, cDNA Library Preparation: Michael J. Toshiyuki and Piero Carninci (RIKEN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            High quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             602672194F1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:4794790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia; Eutheria;
l (bases 1 to 633)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BG706987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BG706987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BG706987.1 GI:13982882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA Library Arrayed by: The I.M.A.G.E. Consortium
                                                                                                                    194
                                                                                                                                                    for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). Li constructed by M. Brownstein (NIMH/NHGRI, National
                                                                                                                                                                                                      /note="Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcgag); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTTTTTTVN-3', size-selected for average insert size 2.3 kb and normalized to ROT 5. This is a primary library enriched
                                                                                                                   Institutes of
                                                                                                                                                                                                                                                                                                                         /clone_lib="NIH_MGC_96"
/tissue_type="hypothalamus"
                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:4794790"
                                                                                                                                                                                                                                                                                                            'Lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                        ocation/Qualifiers
                     31.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Primates;
                     Score 540.2;
Pred. No. 7.
                                                                                                                 Health). Note: this is a NIH_MGC Library."
148 g 127 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  633 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                            633.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M.D., Ph.D.
Brownstein (NHGRI), Shiraki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (LLNL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST 07-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo.
                                                                                                                                                                       Library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         618
```

```
BE263639
LOCUS
                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           at-tgtagagatttcttcagatatctccattaatgaaggga 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTTCTCGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacoccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ttccccaaagctatggacaacgtgacggtccggccaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAGGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGA 633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGACAGACAACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACA-CCAAACGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGGGGCTGGCTGTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acggggctggctgctctgtgtctctttccaaggagtgcccgtgcgcagcgggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: cgapbs-r@mail.nih.gov
Plate: LLCM217 row: p column: 16
High quality sequence stop: 545.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          BE263639
601192064F1 NIH_MGC_7 Homo
                                                                                                                                                                                                                                                                               Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                         NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, N
                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 545)
                                                                                                                                                                                                                                                                                                                                                                                                           EST
                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA sequence.
                                                                                                                                                                                                                                                                                                Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                        BE263639.1 GI:9137183
                                                                                                                         /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="makagE:3536127"
/clone_lb="makagE:454627"
/tissue_type="small cell carcinoma"
/cell_line="MGC3"
/note="Organ: lung; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; CDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5/ adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of california, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                             /lab_host="DH10B (phage-resistant)"
                                                                                                                                                                                                                         location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                            45 bp mRNA lir
sapiens cDNA clone
                                                                                                                                                                                                                                                                                                          Mammalian
                                                                                                                                                                                                                                                                                                          Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                       Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            lear EST 13-JUL-2000
IMAGE:3536127 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         173
                                                                                                                                                                                                                                                                                                    RESULT 1
BI598759
                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Дò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                ACCESSION
                                                                                                         JOURNAL.
                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                            880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
```

```
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              400 ctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgcgccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGAGCAACACCCAAACGCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agtgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gcaqaattccagtggtacaaggatgacaaaagactgattgaaggaaa-gaaaggggtgaa 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccctca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGGTACGGAGAGTAAAGGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9tggtacggagagtaaaggtcaccgtgaactatccacccatacatttcagaagccaagggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    attgtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99cccttacacctgctcggtgcagacagaccaacccaaagacctctagggtccacctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGGTGTCCCCGTGGGACAAAAGGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCACCAGGGAGCAGTCAGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATCTCTCCCAAAGCGGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cacatctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaaattcagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttggaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGTGCAAGTATCTCCCAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCCCTTACACCTGCTCGGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACAATATTAGCCTCACCTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   543;
                Contact: Robert Strausberg, Ph.D.
Email: Ggapbs r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NH
Toshiyuki and Piero Carninci (RIKEN)
cDNA Library Arrayed by: The I.M.A.G.E. Consortium
DNA Sequencing by: Incyte Genomics, Inc.
                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 754)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collections (1999)
                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                      BI598759.1
                                                                                                                                                                                                                                                                                                                       mRNA sequence.
BI598759
                                                                                                                                                                                                                                                                                                                                                      603245538F1 NIH_MGC_96 Homo
                                                                                                                                                                                                                                                                    numan.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                               545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
     distribution: MGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ρ
                                                                                                                                                                                                                                                                                                     GI:15491698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31.4%;
99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 531.4;
Pred. No. 1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144
clone distribution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                    dq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .4e-66
                                                                                                                                                                                                                                                                                                                                                                      mRNA
                                                                                                                                                                                                                                                                                                                                                      cDNA clone IMAGE: 5287832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indeis
 information
                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                          Collection
                                                                   (NHGRI),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  545;
                                                                                                                                                                                                           Euteleostomi; Homo.
                                                                                                                                                                                                                                                                                                                                                                      EST 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
 can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                       Shiraki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             459
 þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                      ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۳.
```

```
RESULT 1
AU080629
                                                                                                                                                     Д
                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                    DЬ
                                                                                                                                                                                                                                                                                                                Qy
      LOCUS
                                                                                                                   Š
                                                                                                                                                                                  Qy
                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                    Вb
                                                                                                                                                                                                                                                                                                                                                                               QУ
                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                             ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                       729
                                                                                                                                                       670
                                                                                                                                                                                                                        610
                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                      550
                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                    490
                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                    430
                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             191 GTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAACATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacactct 60
                                                                                                                                                CAGACAGACAA-CACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCCCAAA
                                                                                                                                                                                                                                  tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg 480
                                                                                                                                                                                                                                                                                                                                             ACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                 ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                    AATGTAGAGA-TTCTTCAGATATCTC 753
                                                                                                                   attgtagagatttcttcagatatctc 566
                                                                                                                                                                 cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa 540
                                                                                                                                                                                                                TACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCCTTACACCTGCTCGGTG
                                                                                                                                                                                                                                                                             GGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAACGCAG
                                                                                                                                                                                                                                                                                                    999aatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccääaacgcag
                                                                                                                                                                                                                                                                                                                                                                     actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                           TTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagtgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACGGGGCTGGCTGTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAGGAAAGAAAGAAAG-AAAAAAACCGAACCTGACAAAAAAGAAGAAAAAAGAAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   562;
      AU080629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLAM11727 row: 1 column: 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   quality sequence stop: 754.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcgag pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcgag ); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTTTVN-3', size-selected for average insert size 2:3 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMI/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library."

a 190 c 189 g 163 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="hypothalamus"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="IMAGE:5287832"
/clone_lib="NIH_MGC_96"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31.2%;
99.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  row: 1 column:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 528.4; DB 10; Length 754; Pred. No. 3.4e-66; o; Mismatches 1; Indels 3;
     768
   ďď
     mKNA
 linear
 EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ω,
12-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                  728
                                                                                                                                                                                                                669
                                                                                                                                                                                                                                                                               609
                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                               549
                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                              489
                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            υ
••
            Qy
                                                                         δÃ
                                                                                                            В
                                                                                                                                           Qγ
                                                                                                                                                                           Db
                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                             рЬ
                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                           Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                           204
                                                                                                                                                                                                            104
                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                          610;
```

```
DEFINITION
284 gegecacecteaggtgeactattgacaacegggteaceegggtggeettggettaaacegea 343
                                                                                                                                               164 tetettgggcaatetteaeggggetggetgetetgtgtetetteteeaaggagtgeeegtge 223
                                                                                                                                                                                                                                                                        84 GTCCTTCAGCAAAACAGTGGATTTAAATCTCCTCGGACTAGCTTGAGAGCAACACAATCT 143
                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                 1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60
                                                      gcagcggagatgccaccttccccaaagctatggacaacgtgacggtccggcagggggaga 283
                                                                                                                                                                                                            GAAGAAAAAGAAG
                                                                                                                                                                                                                       gaagaaaagaagaagaaaaaaaatcatgaaaaccatccagocaaaaatgcacaattcta 163
                                                                                                                                                                                                                                                                                                                atcaggaaagaaa-----
                                                                                                                                TCTCGTGGGCAATCTTCACGGGGCTGGCGGCTCTGTGCCTCTTCCAAGGAGTGCCGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hashimoto,K., Kusuda,J., Tanuma,R., Ito,A., Hirata,M., Toyoda,A., Suzuki,Y., Sasaki,M. and Sugamo,S. Isolation of full-length cDNA clones from a mouse brain cDNA library made by oligo-capping method Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Katsuyuki Hashimoto
Division of Genetic Resources
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AU080629 Sugano mouse brain mncb Mus musculus cDNA clone MNCb-58835', mRNA sequence.
AU080629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    URL: http://www.nih.go.jp/yoken/genbank/
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              National Institute of Infectious Diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-1, Toyama 1-chome,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AU080629.1 GI:6085383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 768)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        232
                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        khashi@nih.go.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="Organ: brain; Vector: pME18S-FL3; 1st strand cDNA
was primed with an oligo(dT) primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /dev_stage="adult"
/lab_host="TOP10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone_lib="Sugano mouse brain mncb'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="MNCb-5883"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus'
/strain="C57BL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eutheria;
                                                                                                                                                                                                    -----AAAAAATATGAAAACCATCCAGGCAAAAATGCACAATTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                         31.0%;
88.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  183 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shinjuku-ku, Tokyo 162-8640, Japan
                                                                                                                                                                                                                                                                                                 -gaaagaaaaaaaccgaacctgacaaaaaa 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  157 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 others
                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 768;
                                                                                                                                                                                                                                                                                                                                                                                                                        24;
                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                          377
                                                                                                                                317
                                                                                                                                                                                                    257
                                                                                                                                                                                                                                                                            203
                                                                                                                                                                                                                                                                                                                                                                                                                        ω
```

```
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
AI753140/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
   BASE COUNT
                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tctctcccaaagcggttggctttgtgagtga 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atattagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaagggaaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTATACCTGCTCGGTACAGACAGCCAACCACCTAAGACCTCCAGGGTCCACCTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cttacacctgctcggtgcagacagaccaacccaaagacctctagggtccacctcattg 523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTAACACCCAGACCCAGTACAGCATTGAGATCCAGAATGTGGATGTGTACGATGAGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacgagggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTNT-CCAAGGCCGTTGGCTTTGNGAGTGA 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACATCAGCCTCACTTGCATAGCCACAGGTAGACCGGAGCCTACAGTAACCTGGANACATA 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGCCACCCTCAGGTGCACAATTGACAACCGAGTCACCCGGGTGGCCTGNCTAAACCGCA 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beckstrom-Sternberg,S.M., Green,E.D., Pow., P.G., Hotchkiss,R.N. and Francomano,C.A. SGAP: The Skeletal Genome Anatomy Project Unpublished (1997)
Contact: Libin Jia
                                                                                                                                                                                                                                                                            Email: libin@helix.nih.gov
DNA Sequencing and analyses by National Institutes
Intramural Sequencing Center (NISC).
Plate: 05 row: g column: 10
Seq primer: -21M13 forward primer (ABI).
                                                                                                                                                                                                                                                                                                                                                                                     Medical Genetics Branch
National Human Genome Research Institute
10/10C101, 9000 Rockville Pike, Bethesda,
Tel: 301-402-4877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 486)
Jia,L.B., Young, M.F., Touchman, J.W., Bouffard, G.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          486 bp cr05g10.xl Jia bone marrow stroma HBMSC_cr05g10 3', mRNA sequence. AI753140 GI:5131404
                                                                                                                                                                                                                                                                                                                                                                            Fax: 301-496-7157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
   88
 ω
/note="Vector: pBluescript; Site_1: EcoRI; Site_2: XhoI; mRNA made from human bone marrow stroma, cDNA made by oligo-dT priming. Directionally cloned. Size-selected for average insert size >0.5 kb. Library supplied by Dr. Libin Jia (NHGRI)."
                                                                                                                                                                                          /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="HBMSC_cr05g10"
                                                                                                   /tissue_type="bone marrow stroma"
/dev_stage="mixed"
/lab_host="XL1-blue MRF'/SOLR"
                                                                                                                                                                       /clone_lib="Jia bone marrow stroma"
                                                                                                                                                        /sex="mixed"
                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                        Bethesda, MD 20892-1267, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA linear EST 22-JUN-1999
Homo sapiens cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Powell, J.I., Yang, L.M., Robey
                                                                                                                                                                                                                                                                                                                                    of Health
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      463
```

```
B
                     δÃ
                                                В
                                                                       Qy
                                                                                                  당
                                                                                                                         γ
                                                                                                                                                   Дb
                                                                                                                                                                           QΥ
                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                            ΩV
                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                       뫄
                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 28.7%;
Best Local Similarity 100.0%;
Matches 486; Conservative
                                                                                                                                                                                                                             1439
                         1679
                                                                         1619
                                                                                                                           1559
                                                                                                                                                                            1499
                                                                                                                                                                                                                                                              1379 taggtacaatggagttttcttttcccaaacgggaagaacacaggcacacccggcttggacc 1438
                                                                                                                                                                                                                                                                                                                              1319
                                                                                                                                                                                                                                                                                                                                                               1199
                                                                                                  126
                                                                                                                                                   186
                                                                                                                                                                                                                                                                                                                                                                                                  246
                                                                                                                                                                                                                                                      306
                                                                                                                                                                                                                                                                                                                                                  426 TACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATTTGAGGGAAGGGGAACAA
                                                                                                                                                                                                                                                                                                     366
                                                99
                                           CCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGCACTTTGGT
                                                                                                         ccatagagacgaacagaatgagaccttccggcccaagcgtggcgctgcggggcactttggt 1618
                                                                                                                                              TGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCAGT 127
                                                                                                                                                            tgcccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaagt 1558
                                                                                                                                                                                                CACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTCTC
                                                                                                                                                                                                              cactgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctc 1498
                                                                                                                                                                                                                                                                                                               agaatactttggggggaaaaaagttttaaaaaaggaaattgaaaattgccttgcagatatt 1378
AAAAAA 1
                     aaaaaa 1684
                                                                                                                                                                                                                                                  TAGGTACAATGGAGTTTTCCTTTTCCCAAACGGGAAGAACACAGCACACCCGGCTTGGACC 247
                                                                                                                                                                                                                                                                                                   AGAATACTTTGGGGGGAAAAAAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 486; DB 9;
Pred. No. 4.2e-60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                              67
                                                                                                                                                                                                 187
                                                                                                                                                                                                                                                                                                   307
                                                                                                                                                                                                                                                                                                                                                   367
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

Search completed: July 11, 2002, 21:28:09 Job time: 10368 sec

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM nucleic
    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                          and is derived by analysis of the total score distribution.
   11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
11661.4
                                                                                                                                                                                                                                                             Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                          Pending_Patents_NA_New:*

1: /cgn2_6/ptodata/2/pna/PCT_NEW_COMB.seq:*

2: /cgn2_6/ptodata/2/pna/US06_NEW_COMB.seq:*

3: /cgn2_6/ptodata/2/pna/US07_NEW_COMB.seq:*

4: /cgn2_6/ptodata/2/pna/US08_NEW_COMB.seq:*

5: /cgn2_6/ptodata/2/pna/US08_NEW_COMB.seq:*

6: /cgn2_6/ptodata/2/pna/US10_NEW_COMB.seq:*

7: /cgn2_6/ptodata/2/pna/US10_NEW_COMB.seq:*
                                                                                                                                                                                                                                                        Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                               7.65.43.21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hits satisfying chosen parameters:
   1693
1 gt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   July 12, 2002, 00:32:21; Search time 418.18 Seconds (without alignments) 6816.544 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                               Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1156321 seqs, 841861299 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-700-397-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-978-403A-522
US-09-978-681A-522
US-09-978-681A-522
US-09-978-564A-522
US-09-978-757A-522
US-09-978-375A-522
US-09-978-423A-522
US-09-978-423A-522
US-09-978-423A-522
US-09-978-423A-522
US-10-013-918A-522
US-10-013-918A-522
US-10-017-0182A-522
US-10-119-480-125
US-10-121-049-375
US-10-121-049-375
US-10-121-043-375
US-10-121-043-375
US-10-121-043-375
US-10-121-054-375
US-10-121-054-375
US-10-121-056-375
US-10-121-056-375
US-10-121-058-375
US-10-121-058-375
US-10-121-058-375
US-10-121-058-375
US-10-121-058-375
US-10-121-058-375
US-10-121-050-375
US-10-121-058-375
US-10-121-058-375
US-10-121-050-375
US-10-121-050-375
US-10-121-058-375
US-10-121-050-375
US-10-121-050-375
US-10-121-050-375
US-10-121-050-375
US-10-121-050-375
                                                                                                                                                                                                                                                             IJ
                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2312642
                  Sequence
Sequence
Sequence
Sequence
Sequence
                                                                          Sequence
Sequence
Sequence
                                                                                                      Sequence
Sequence
Sequence
                                                                                                                                Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                       Sequence
Sequence
                                                                                                                                                                                         Sequence
Sequence
                                                                                                                                                                                                                                                          Description
Sequence
          Sequence
                                                                 Sequence
                                                                                                                                                                                                            Sequence
                  522,
125,
375,
375,
375,
375,
375,
375,
375,
                                                                                                                                 5522222222
RESULT
```

4 .	44	ω.	42	41	40	39	38	37	36	35	34	ü	32	3	30	29	28	27	
1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	1661.4	
98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1		٠	98.1			98.1	
1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	
σ	9	σ	6	თ	6	6	9	σ	6	σ	σ	6	σ	δ	6	g	σ	σ	
US-10-124-822-375	US-10-121-059-375	US-10-121-055-375	US-10-121-042-375	US-10-121-061-375	US-10-121-052-375	US-10-121-048-375	US-10-121-040-375	US-10-121-051-375	US-10-121-046-375	US-10-121-045-375	US-10-121-041-375	US-10-123-109-375	US-10-123-213-375	US-10-123-212-375	US-10-123-157-375	US-10-123-156-375	US-10-123-154-375	US-10-123-108-375	
			Sequence 375,	Sequence 375,				Sequence 375,		Sequence 375,	Sequence 375,	Sequence 375,					Sequence 375,	Sequence 375,	
App																			

ALIGNMENTS

	g
APPLICANT: Desnoyers, Luc APPLICANT: Desnoyers, Luc APPLICANT: Ferrara, Napoleon APPLICANT: Filvaroff, Ellen APPLICANT: Filvaroff, Ellen APPLICANT: Fong, Sherman APPLICANT: Goodowsti, Baing APPLICANT: Gerber, Hanspeter APPLICANT: Gerber, Hanspeter APPLICANT: Gerber, Mary E. APPLICANT: Godowsti, Paul J. APPLICANT: Godowsti, Paul J. APPLICANT: Gurney, Austin L. APPLICANT: Hillan, Kenneth J APPLICANT: Hillan, Kenneth J APPLICANT: Napier, Mary A. APPLICANT: Napier, Mary A. APPLICANT: Napier, Mary A. APPLICANT: Pan, James; APPLICANT: Pan, James; APPLICANT: Stewart, Timothy A. APPLICANT: Stewart, Timothy A. APPLICANT: Williams, P. Mickey APPLICANT: Williams, P. Mickey APPLICANT: Wood, William I. TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic FILE REFERENCE: P2540P107 APPLICANT: WOOD, William I. APPLICANT APPLICATION NUMBER: 60/06250 PRIOR APPLICATION NUMBER: 60/06250 PRIOR FILING DATE: 1997-10-17 PRIOR APPLICATION NUMBER: 60/06250 PRIOR APPLICATION NUMBER: 60/06344 PRIOR APPLICATION NUMBER: 60/06364 PRIOR APPLICATION NUMBER: 60/066364 PRIOR APPLICATION NUMBER: 60/066	US-09-978-403A-522 ; Sequence 522, Application US/09978403A ; GENERAL INFORMATION: ; APPLICANT: Ashkenazi, Avi ; APPLICANT: Bakkenazi, Avi

.																		***************************************					·										
			, .,	· · · ·						٠. ٠			٠. ٠.		٠. ٠.	·· ··				·· ··	٠. ٠			٠. ٠.					·. ··			٠. ،	
PRIOR PRIOR PRIOR PRIOR PRIOR	PRIOR PRIOR PRIOR PRIOR	PRIOR PRIOR PRIOR	PRIOR PRIOR PRIOR	PRIOR PRIOR PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	PRIOR	38
APPLICATION FILING DATE APPLICATION FILING DATE	APPLICATION FILING DATE APPLICATION APPLICATION	APPLICATION FILING DATE APPLICATION	FILING DATE APPLICATION	APPLICATION FILING DATE APPLICATION	APPLICATION FILING DATE	APPLICATION FILING DATE	APPLICATION	APPLICATION	APPLICATION	APPLICATION	APPLICATION	APPLICATION	APPLICATION FILING DATE	APPLICATION FILING DATE	APPLICATION FILING DATE	APPLICATION FILING DATE	FILING DATE	FILING DATE	FILING DATE	FILING DATE APPLICATION	APPLICATION	APPLICATION	APPLICATION FILING DATE	FILING DATE	FILING DATE	FILING DATE	AE.	APPLICA	APPLICA FILING	FILING	LING		υ.Ο.
1998-05-1 UMBER: 60 1998-05-1 UMBER: 60 1998-05-1	1998-05- UMBER: 6 1998-05- UMBER: 6	UMBER: 60 1998-05-1 UMBER: 60	1998-05-07 UMBER: 60/085	199 199	UMBER: 60/0846 1998-05-07	1998-0	1998-05-0	1998-05-0 UMBER: 60	1998-05-0 UMBER: 60	UMBER: 6	UMBER: 60	UMBER: 60	IUMBER: 60 1998-04-3	IUMBER: 60 1998-04-2	IUMBER: 60 1998-04-2	IUMBER: 60/0835 1998-04-29	1998-04-	1998-04-29	1998-04-29	1998-04-29 UMBER: 60/083	1998-04-	UMBER: 60	TUMBER: 6	1998-04-	1998-04-27	1998-04-23	NUMBER: 60	NUMBER:	NUMBER: 6: 1998-04-	1998:	: 1998-04-22	NUMBER	NUMBER: 6

PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
PRIOR FILING DATE: 1998-03-11
PRIOR PRIOR PRICING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078906
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/079294
PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079664
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079664
PRIOR APPLICATION NUMBER: 60/079664
PRIOR APPLICATION NUMBER: 60/079664
PRIOR APPLICATION NUMBER: 60/079664
PRIOR APPLICATION NUMBER: 60/079669
PRIOR APPLICATION NUMBER: 60/079669
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/080105
PRIOR APPLICATION NUMBER: 60/080105
PRIOR APPLICATION NUMBER: 60/080105
PRIOR APPLICATION NUMBER: 60/080105
PRIOR APPLICATION NUMBER: 60/0801105
PRIOR APPLICATION NUMBER: 60/080131
PRIOR APPLICATION NUMBER: 60/080131
PRIOR APPLICATION NUMBER: 60/080131
PRIOR APPLICATION NUMBER: 60/080331
PRIOR PRILING DATE: 1998-03-03-03
PRIOR PRILING DATE: 1998-03-03-03
PRIOR PRILING DATE: 1998-03-03-03
PRIOR APPLICATION NUMBER: 60/080334
PRIOR PRILING DATE: 1998-03-03-03
PRIOR APPLICATION NUMBER: 60/080334
PRIOR APPLICATION NUMBER: 60/080334
PRIOR APPLICATION NUMBER: 60/080334
PRIOR APPLICATION NUMBER: 60/080334
PRIOR APPLICATION NUMBER: 60/080190
PRIOR APPLICATION NUMBER: 60/080190
PRIOR APPLICATION NUMBER: 60/080190
PRIOR APPLICATION NUMBER: 60/080190
PRIOR

PRIOR

FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081952
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081838
FILING DATE: 1998-04-15

```
Ş
                               몽
                                                  γQ
                                                                                   망
                                                                                                            Qγ
                                                                                                                                       밁
                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                밁
                                                                                                                                                                                                                       QУ
                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .. .. .. .. .. .. ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
    901
                               845
                                                                                   785
                                                                                                             781
                                                                                                                                       725
                                                                                                                                                                    721
                                                                                                                                                                                                665
                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                       605
                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                            545
                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                 485
                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                        425
                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/085704
REILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085697
REILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-15
                                        aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                             accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                               atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                  tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacaccttgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaaaaaatcatgaaaaccatccagccaaaatgcacaattctatctctcttgggcaatcttc
gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                          aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                               accytyaactatccaccatacatttcayaayccaayyytacayytytccccytyyyacaa
                                                                                                                                                   gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                           ggctttgtgagtgaagacgaatacttggaaattccagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                        attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                        attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                            cagacagacaacccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                    gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                           ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                  atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                             cagacagacaaccaacagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                    tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ttccccaaagctatggacaacgtgacggtccggccaggggggagagcgccacc@tcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acggggctggctgtctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaaaaaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1661.4; DB 5; Pred. No. 1.6e-273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    اسم
• •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                           904
                                                                                844
                                                                                                          840
                                                                                                                                    784
                                                                                                                                                                780
                                                                                                                                                                                             724
                                                                                                                                                                                                                                                  664
                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                               544
                                                                                                                                                                                                                                                                                                                                                                                                                    484
                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1:
```

```
밁
                                       Ωy
                                                                 Вþ
                                                                                       δÃ
                                                                                                                 B
                                                                                                                                       Ωy
                                                                                                                                                                  В
                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                   뮹
                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                    DЪ
                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                           Ϋ́
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ϋ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                  1625
                                         1621
                                                                                                                                                                  1445
                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                    1205
                                                                                                                                                                                                                                                                                                                                                                                                                     1145
                                                                                                                                                                                                                                                                                                                    1265
                                                                                                                                                                                                                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                 1565
                                                                                                                  1505
                                                                                                                                                                                                                    1385
                                                                                                                                                                                                                                           1381
                                                                                                                                                                                                                                                                   1325
                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                         1561
                                                                                                                                          1501
                                                                                                                                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                            ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                           ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                             99tacaatggagttttcttttcccaaacgggaagaacacagcagcacacccggcttggaccca
                                                                                                                                                                                                                                                                              | aatactttggggggaaaaaagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                               ccaccaccaccaccacacacagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                              ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tcanaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                           atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                             cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacaccagcacacccggcttggaccca
                                                                                                                                                                                                                                                                 aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                  gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tccaacagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                 ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc 1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1679
                                       1675
                                                                                                                                                                                                                                                                 1384
                                                                                                                                                                                                                                                                                          1380
                                                                                                                                                                                                                                                                                                                                                                                           1260
                                                                                        1620
                                                                                                                 1564
                                                                                                                                                                  1504
                                                                                                                                                                                        1500
                                                                                                                                                                                                                 1444
                                                                                                                                                                                                                                         1440
                                                                                                                                                                                                                                                                                                                   1324
                                                                                                                                                                                                                                                                                                                                          1320
                                                                                                                                                                                                                                                                                                                                                                   1264
                                                                                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                          1560
                                                                                                                                                                                                                                                                                                                                                                                                                   1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     964
                                                               1624
```

RESULT 2 US-09-978-544A-522 Sequence 522, Applic GENERAL INFORMATION: APPLICANT: APPLICANT: APPLICANT: APPLICANT:
APPLICANT:
APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: Ashkenazi, Avi Godowski, Paul J.
Grinaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J.
Kljavin, Ivar J. Gerritsen, Mary E. Goddard, Audrey Gerber, Hanspeter Gao, Wei-Qiang Fong, Filvaroff, Ellen Ferrara, Napoleon Eaton, Dan Desnoyers, Luc Botstein, David Baker Kevin Application US/09978544A Sherman P

```
PRIOR FILING DATE: 1998-03-25

PRIOR APPLICATION NUMBER: 60/079656

PRIOR FILING DATE: 1998-03-26

PRIOR FILING DATE: 1998-03-27

PRIOR FILING DATE: 1998-03-27

PRIOR APPLICATION NUMBER: 60/079664

PRIOR APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/978,544A
CURRENT FILING DATE: 2002-03-19
PRIOR APPLICATION NUMBER: 09/91885
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/064249
PRIOR PILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR PILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR FILING DATE: 1998-03-11
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTIGATION OF THE REFERENCE:
                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078939
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/079728
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079786
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic OF INVENTION: Acids Encoding the Same REFERENCE: P2630P1C13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/077641
FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077649
FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01
                                                                APPLICATION NUMBER: 60/080165 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080194
                                                                                                                                 APPLICATION NUMBER: 60/080107
FILING DATE: 1998-03-31
                                                                                                                                                                               APPLICATION NUMBER: 60/080105
FILING DATE: 1998-03-31
                                                                                                                                                                                                                          APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079663
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/078936
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/078886
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/077791
FILING DATE: 1998-03-12
APPLICATION NUMBER: 60/078004
                                                FILING DATE:
                                                                                                                                                                                                                                                                             FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Paoni, Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sophia s
er, Mary
                                             1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ×
```

PRIOR APPLICATION NUMBER: 60/083545
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083554
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083558
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083559
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083500
PRIOR APPLICATION NUMBER: 60/083742
PRIOR APPLICATION NUMBER: 60/083742
PRIOR APPLICATION NUMBER: 60/083742
PRIOR FILING DATE: 1998-04-30
PRIOR FILING DATE: 1998-04-30 PRIOR APPLICATION NUMBER: 60/083336
PRIOR FILING DATE: 1998-04-27
PRIOR APPLICATION NUMBER: 60/083322
PRIOR TILING DATE: 1998-04-28
PRIOR PELLING DATE: 1998-04-29
PRIOR FILING DATE: 1998-04-29
PRIOR FILING DATE: 1998-04-29
PRIOR PELLING DATE: 1998-04-29
PRIOR FILING DATE: 1998-04-29
PRIOR FILING DATE: 1998-04-29 PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081195
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081203
PRIOR FILING DATE: 1998-04-09 PRIOR PRIOR PRIOR APPLICATION NUMBER: 60/ PRIOR FILING DATE: 1998-04-15 PRIOR APPLICATION NUMBER: 60/ PRIOR FILING DATE: 1998-04-21 PRIOR APPLICATION NUMBER: 60/081819
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION UNMBER: 60/081952
PRIOR FILING DATE: 1998-04-15 PRIOR APPLICATION NUMBER: 60/081229
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION UNMBER: 60/081955
PRIOR FILING DATE: 1998-04-15 PRIOR APPLICATION NUMBER: 60/1 PRIOR FILING DATE: 1998-04-08 PRIOR APPLICATION NUMBER: 60/1 PRIOR APPLICATION NUMBER: 60/082797
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION UNMBER: 60/082796
PRIOR FILING DATE: 1998-04-23 PRIOR PRIOR APPLICATION NUMBER: 60/081070 PRIOR FILING DATE: 1998-04-08 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080334 PRIOR APPLICATION NUMBER: 60/080333
PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080328 PRIOR FILING DATE: 1998-04-01 OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-22 FILING DATE: 1998-05-06 APPLICATION NUMBER: 60/084441 APPLICATION NUMBER: 60 APPLICATION NUMBER: 60/083499 FILING DATE: 1998-04-29 FILING DATE: APPLICATION ! FILING DATE: 1998-05-05 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/082569 FILING DATE: 1998-04-21 APPLICATION NUMBER: 60/081817 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/082704 APPLICATION NUMBER: 60/081071 NUMBER: 1998-05-06 60/083496 60/084414 60/082700 60/082804 60/082568 60/081838 60/081049

```
밁
                                                            ΩV
                                                                                                                                                                                                                                                                                          Qy
      Q
                                                                                        Вb
                                                                                                                  Qy
                                                                                                                                                Db
                                                                                                                                                                         Qy
                                                                                                                                                                                                         В
                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                    425
481 cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa 540
                                                             421
                                                                                           365
                                                                                                                     361
                                                                                                                                                 305
                                                                                                                                                                            301
                                                                                                                                                                                                          245
                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                  185
                                                                                                                                                                                                                                                                           181 acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                        125
                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                         66 atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R FILING DATE: 1
R APPLICATION NO
R FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                         6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/085338
FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/085323
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085573 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/085582
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085339 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/084643 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-01
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/084640 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/084598
                                             tacagcatcgagatccagaacgtggatgtgttatgacgaggggcccttacacctgctcggtg 480
                                                                                  tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                          actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                            actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct 360
                                                                                                                                                                                                 ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                     ttccccaaagctatggacaacgtgacggtccggcagggggagagagcccccctcaggtgc
                                                                                                                                                                                                                                                                                                                   aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                  aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                   gtccttcagcaaaacagtggatttaaaatctccttgcacaagcttgagagcaacacaaatct 60
                                                                                                                                                                                                                                                            acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                          gtccttcagcaaacagtggatttaaatctccttgcacaagcttgagagcaacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER: 60/085697: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER: 60/085689
1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1661.4; DB 5;
Pred. No. 1.6e-273;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                               484
                                                                                                                                             364
                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                            244
                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                            124
                                                                                                                                                                                                                                                                                                                                                                                                                                      65
                                                                                                                                                                                                                                                                                                                     184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1:
```

01 atagcaactggtagaccon	
601 atagcaactggtagaccac 601 atagcaactggtagaccac 605 atagcaactggtagaccac 605 atagcaactggtagaccac 606 ggctttgtgagtgaagacc 6072 gactacgagtgcagtgcagtgcagtgcagtgcagtgcag	04 40 40 40 40
atagcaactggtagaccage	54 48 66 60 60 66 66 66 66 66 66 66 66 66 66 6
agcctacggttacttggagaccattctct agcctacggttacttggagacacattctct agcattacttggaaattcagggcatcaccggg 	cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa 5 attgtagagatttcttcagatatctcccattaatgaagggaacaatattagcctcacctgc 6

```
RESULT 3
US-09-978-681A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 522, Application US/09978681A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Ashkenazi, Avi APPLICANT: Baker Kevin P.
                                                                                                                                     PRIOR
                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-11-03 PRIOR APPLICATION NUMBER: 60/065311
                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                               PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION UNMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/066364 PRIOR FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/978,681A CURRENT FILING DATE: 2002-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
         PRIOR
                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1565 atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag 1624
                                     APPLICATION NUMBER: 60/078936
FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078910
FILING DATE: 1998-03-20
                                                                                                    APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20
                                                                                                                                   APPLICATION NUMBER: 60/078004 FILING DATE: 1998-03-13
                                                                                                                                                                                  APPLICATION NUMBER: 60/077791
         FILING DATE:
                        APPLICATION NUMBER: 60/078939
                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                    FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Grimaldi, J. Christopher Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dan
                                                                                                                                                                    1998-03-12
                                                                                                                                                                                                                                                                                                                                                            1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherman
         1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Napoleon
                                                   PRIOR
PRIOR
                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                            PRIOR PRIOR
                                                                                PRIOR
                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                 PRIOR
                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/079294 PRIOR FILING DATE: 1998-03-25
DR AFFLICATION NUMBER: 60/082796
OR APPLICATION NUMBER: 60/082796
OR APPLICATION NUMBER: 60/083336
IOR APPLICATION NUMBER: 60/083336
IOR APPLICATION NUMBER: 60/083336
                                                                                            APPLICATION NUMBER: 60/082700
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081229
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/080165
                                                                                                                                             APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-22
                                                                                                                                                                             APPLICATION NUMBER: 60/
FILING DATE: 1998-04-22
                                                                                                                                                                                                                         FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60
FILING DATE: 1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/079663
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/079689
FILING DATE: 1998-03-27
                                                                                                                                                                                                            FILING DATE: 1998-04-
                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER: 60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER: 60/080105: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER: 60/079786
                                                                                                                                                                                                                                                                       1998-04-15
                                                                                                                                                                                                                                          1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-03-
                                                                                                                                                                                                                         60/082569
                                                                                                                                                                                                                                                                                                                                                   60/081819
                                                                                                                                                            60/082804
                                                                                                                                                                                            60/082704
                                                                                                                                                                                                                                                          60/082568
                                                                                                                                                                                                                                                                                        60/081838
                                                                                                                                                                                                                                                                                                                       60/081952
                                                                                                                                                                                                                                                                                                                                                                                   60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                  60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/079920
```

```
Ω
                                     Вb
                                                                  Qy
                                                                                               Query Match
Best Local Similarity
Matches 1673; Conserv
                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
61 atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 120
                                     σ
                                                                                                                                                           FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085697
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                         FILING DATE: 1998-0: APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-30
APPLICATION NUMBER: 60/084366
FILING DATE: 1998-05-05
                                                                                                                                                                                                           APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                          APPLICATION NUMBER: 60/085573
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/085689 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085700
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085323 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-09
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/084600 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084598 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084640 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084639
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/084414 FILING DATE: 1998-05-06 APPLICATION NUMBER: 60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083559 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/083554 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083545 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083499 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-28 APPLICATION NUMBER: 60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/083495
                                                 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60
                                 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacaacatct 65
                                                                                              98.1%;
nilarity 99.9%;
Conservative
                                                                                                                                                                                                                                                         NUMBER: 60/085580
1998-05-15
                                                                                                                                                                                                                                                                                                                                                       1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                    60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083496
                                                                                              Score 1661.4;
Pred. No. 1.6e-
0; Mismatches
                                                                                                 0;
                                                                                         4; DB 5;
1.6e-273;
                                                                                               Indels
                                                                                                                             Length 1679;
                                                                                              Ļ,
                                                                                            Gaps
                                                                                              ۲.
```

```
RESULT 4
US-09-978-757A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 522, Application US/09978757A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: APPLICANT:
                                         CURRENT APPLICATION NUMBER: US/09/978,757A CURRENT FILING DATE: 2002-03-19
                                                                                           APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Ashkenazi, Avi
       PRIOR FILING DATE: 2001-07-30
                                                                                FILE REFERENCE: P2630P1C26
                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                       PRIOR APPLICATION NUMBER: 09/918585
                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atagagacgaacagaatgagaccttccggccccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctgcaagctgcatcgtgcaacctctttggtgccagtgtggggcaaggggctcaggstctcttg 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggctggaccca 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccaccaccaccaccaccaccacacagcaatggcaacaccgacagcaaccaatcagatatata 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggtacaatggagttttcttttcccaaacgggaagaacacaccagcacacccggctkggaccca 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ccaccaccaccaccaacacaacagcaatggcaacaccgacagcaaccaatcagatatata 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 1204
                                                                                                                                                                                   Stewart, Timothy A.
                                                                                                                                                                      Tumas, Daniel
                                                                                                                                                                                                         Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                     Kuo,
                                                                                                                                                                                                                                                Paoni, Nicholas
                                                                                                                                                                                                                                                                    Napier, Mary A. Pan, James;
                                                                                                                                                                                                                                                                                                                       Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                        Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                 Grimaldi,
                                                                                                                                                                                                                                                                                                                                                                                               Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                    Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baker Kevin P.
                                                                                                                                                                                                                                                                                                   Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Napoleon
                                                                                                                                                                                                                                                                                                                                                                               J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ellen
                                                                                                               and
                                       J. Carlo
                                                                                                               Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1384
                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0-PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/079786 PRIOR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079656
PRIOR FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/078939 PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/065311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1997-11-03
                                                                                                       FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081071
                                                                                                                                            FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/079920
                 FILING DATE:
                                                                                         FILING DATE: 1998-04-08
                                                                                                                                                                                                     FILING DATE: 1998-04-01
                                                                                                                                                                                                                       APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-03-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078910
                                 APPLICATION NUMBER: 60/081203
                                                    APPLICATION NUMBER: 60/081195
FILING DATE: 1998-04-08
                                                                                                                                                                                 APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/077641 FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/077632 FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/066364
NUMBER:
                                                                                                                                                                                                                                                                                                                   1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-03-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1997-11-1
               1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1997-11-
                                                                                                                                                                                                                                                                                               60/080328
                                                                                                                                                                                                                                                                                                                                    60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                60/080107
```

1998-04-09

```
PRIOR
                        PRIOR PRIOR
                                                                           PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
PRIOR
             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                       R FILING DATE:
R APPLICATION N
FILING DATE:
                                                                                                                                                                                            APPLICATION NUMBER: 60/084441 FILING DATE: 1998-05-06 APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084639
                                                                           FILING DATE: 1998-0
APPLICATION NUMBER:
FILING DATE: 1998-0
                                                                                                                                                                                                                                                             FILING DATE: 1998-05
APPLICATION NUMBER:
FILING DATE: 1998-05
                                                                                                                 FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/083322 FILING DATE: 1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-0. APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/082804 FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60
FILING DATE: 1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/081817 FILING DATE: 1998-04-15
FILING
             APPLICATION
                                                             APPLICATION NUMBER:
                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                       FILING DATE:
                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/082704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE: 1998-04-
             NUMBER:
                        NUMBER: 60/
: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER:
                                                                                                 момвек: 60/084600
1998-05-07
                                                  1998-05-07
                                                                                                                             1998-05-07
                                                                                                                                                                                 1998-05-07
                                                                                                                                                                                                                                                                                        1998-05-05
                                                                                                                                                                                                                                                                                                                 1998-04-30
                                                                                                                                                                                                                                                                                                                                        1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-28
                                                                            1998-05-
                                                                                                                                                       1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-22
                                                                                                                                                                                                                                                               1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-21
                                                                                                                                          60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/082796
                                                              60/084643
                                                                                       60/084627
                                                                                                                                                                                                                                                                          60/084414
                                                                                                                                                                                                                                                                                                    60/084366
                                                                                                                                                                                                                                                                                                                                                       60/083500
                                                                                                                                                                                                                                                                                                                                                                                60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/081955
            60/085338
                                      60/085339
                                                                                                                                                                     60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/081819
```

```
Qγ
                                                 Βb
                                                                              Ş
                                                                                                              밁
                                                                                                                                       QΥ
                                                                                                                                                                          Вb
                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                               QУ
                                                                                                                                                                                                                                                                                                Дb
                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Si
Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                    721
                                                                                                              605
                                                                                                                                            601
                                                                                                                                                                          545
                                                                                                                                                                                                                                     485
                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                        425 tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                            421 tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                            365
                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                        305
                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245 ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 aaaaaaatcatgaaaaccatccagccaaaaatgcaccaattctatctcttgggcaatcttc 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OR APPLICATION NUMBER: 60/085323
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/08582
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085700
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085689
OR APPLICATION NUMBER: 60/085689
OR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
FILING DATE: 1998-05
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-15
                                                                                                                         alagcaactgglagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                  gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                      attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                              ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                            ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                  cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                         atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                      attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                 cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                        gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                        999aat9acaa9t99t9cct99atcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atcaggaaagaaagaaagaaaaaaccgaacctgacaaaaaagaagaagaaaaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            _60<u>/</u>085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1661.4; DB 5
Pred. No. 1.6e-273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                         660
                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                 780
                                               724
                                                                                                          664
                                                                                                                                                                                                     600
                                                                                                                                                                                                                                    544
                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
```

۳.

Db

725

gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggaggagtaaaggtc

784

Filvaroff, Ellen

Qy

1021 965 961 905 901 845

1025

1081

1145 1141

1201

1085

В Qγ ₽ Qγ DЪ Qy 뮹 Qy

```
atagagacgaacagaatgagacettccggcccaagcgtggcgctgcggggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                               cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatccgtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aatactttggggggaaaaaagttttaaaaaagaaattgaaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccaccaccaccaccaccacacagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gaggtgagcaacgcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                     atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccaccaccaccaccaccaccaccagcaatgcaatgcaaccaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gaggtgagcaacgcacgtcgaggagggcaggctgcgtctggctgctgctcttcttggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tocaacaagotgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tccaacagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                     1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                              1620
                                                                                                                                                                                                                                                                                                                                                                 1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/978,564A CURRENT FILING DATE: 2001-10-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Williams, P. Mickey
APPLICANY: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C25
                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 2001-0
                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077649
FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/077632
FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077641
APPLICATION NUMBER: 60/079920 FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/079923
                                                                                                                                          FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079663
                                                                                                                                                                            FILING DATE: 1998-03-26
APPLICATION NUMBER: 60/079664
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079689
                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/079294
FILING DATE: 1998-03-25
                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078910
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/077450 FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/066364 FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/065311 FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1997-10-17
APPLICATION NUMBER: 60/064249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/062250
                                                    APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                       APPLICATION
                                                                                        FILING DATE:
                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fong, buc...
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Roy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gurney, Austin L. Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kljavin, Ivar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Grimaldi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Margaret
                                                                                                                                                                                                                                                       NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER: 60/077791
1998-03-12
                                                    1998-03-27
                                                                                        1998-03-27
                                                                                                                           1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. Christopher
                                                                   60/079786
                                                                                                      60/079728
                                                                                                                                                                                                                                                     60/079656
                                                                                                                                                                                                                                                                                                                          60/078939
                                                                                                                                                                                                                                                                                                                                                                                               60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                   60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09/918585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic
```

δÃ

1441 1385

1445

B δÃ 밁 δÃ Вþ QY 밁 Qy 밁 QY 밁 γQ Dр

1325

1381

1265

1261

Qy Вb 80 В

1561

1505

B

US-09-978-564A-522

1625

Sequence 522, Application US/09978564A GENERAL INFORMATION:

APPLICANT: Ashkenazi, Avi APPLICANT: Baker, Kevin P APPLICANT: Botstein, Davic APPLICANT: Desnoyers, Luc APPLICANT: Eaton, Dan APPLICANT: Ferrara, Napole

Botstein, David Desnoyers, Luc Kevin P.

Napoleon

```
Š
                                       В
                                                            Qy
                                                                                     В
                                                                                                             Ş
                                                                                                                                       Д
                                                                                                                                                             δÃ
                                                                                                                                                                                       Дb
                                                                                                                                                                                                              20
                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                       Best Local Similarity Matches 1673; Conserv
                                                                                                                                                                                                                                                                                                    Query
Best L
                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
              301
                                       245
                                                              241
                                                                                                              181
                                                                                       185
                                                                                                                                       125
                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                    y Match
Local (
                                                                                                                                                                                  66 atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaaaaagaagaaga
                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R APPLICATION NUMBER: (R FILING DATE: 1998-05) R APPLICATION NUMBER: (R APPLICATION NUMBER: 1998-05)
                                                                                                                                                                                                                                   R FILING DATE:
R APPLICATION NO
R FILING DATE:
R APPLICATION NO
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                       R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R APPLICATION NI
R APPLICATION WI
R APPLICATION WI
R APPLICATION WI
R FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
APPLICATION 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION |
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION
actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                 ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                 acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                    acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                    aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                aaaaaaatcatgaaaaccatccagccaaaatgcacaattctatctcttgggcaatcttc 180
                                                                                                                                                                                               atCaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 120
                                                                                                                                                                                                                                                                                      98.1%;
nilarity 99.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER: 60/
: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER: 60/
: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER: 60/085582
: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER: 60/
: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER: 60/
: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER: 60/083500: 1998-04-29
                                                                                                                                                                                                                                                                                                                                        NUMBER: 60/085697: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER: 60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER: 60/084598
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER: 60/084640
1998-05-07
                                                                                                                                                                                                                                                                                                                                                               1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                       1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                          60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084441
                                                                                                                                                                                                                                                                                                                                                                           60/085704
                                                                                                                                                                                                                                                                                                                                                                                                  60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                         15
                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                      Score 1661.4; DB 5;
Pred. No. 1.6e-273;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                              Ģ,
                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                              Length 1679;
```

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PILING DATE: 1998-04-27
APPLICATION NUMBER: 60/083320
FILING DATE: 1000

FILING DATE:
APPLICATION 1

FILING DATE: 1998-04-29

NUMBER:

1998-04-28

R FILING DATE: 1998-04
R APPLICATION NUMBER:
R FILING DATE: 1998-04
R APPLICATION NUMBER:

1998-04-

PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-22

APPLICATION NUMBER:

1998-04-22

۲. Gaps

1;

124

60/082796 60/082797 60/082700 60/082804 60/082704 60/082569 60/082568 60/081838 60/081952

PRIOR PRIOR PRIOR

FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-22

PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/ FILING DATE: 1998-04-21 APPLICATION NUMBER: 60/

PRIOR PRIOR PRIOR PRIOR

FILING DATE: FILING DATE: APPLICATION N

NUMBER: NUMBER: NUMBER: NUMBER: NUMBER: NUMBER:

1998-04-15

1998-04-21

PRIOR PRIOR

R APPLICATION N R FILING DATE: R APPLICATION N

1998-04-1 1998-04-15

APPLICATION | FILING DATE: APPLICATION FILING DATE: FILING DATE:

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR

FILING DATE: APPLICATION 1

1998-04-09

1998-04-15

60/081817 60/081955 60/081229 60/081203 60/081195 60/081071 60/081049 60/081070 60/080334 60/080333 60/080328 60/080327 60/080194 60/080165 60/080107 60/080105

1998-04-

60/081819

PRIOR PRIOR

APPLICATION NUMBER: FILING DATE: 1998-04 APPLICATION NUMBER:

1998-04-09

PRIOR PRIOR PRIOR PRIOR

FILING DATE: APPLICATION NUMBER: APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08

1998-04-08

PRIOR PRIOR

FILING DATE: 1998-04 APPLICATION NUMBER:

1998-04-01

APPLICATION NUMBER: APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01

FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/

FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-08

APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08

PRIOR PRIOR

APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER:

1998-03-3 1998-03-3 1998-03-3 1998-03-30

FILING DATE: 1998-03
APPLICATION NUMBER:
FILING DATE: 1998-03

1998-03-31

R FILING DATE:
R APPLICATION N
R FILING DATE:

NUMBER:

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/(APPLICATION NUMBER: 60/(APPLICATION DATE: 1998-04-29 APPLICATION NUMBER: 6 FILING DATE: 1998-04-APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-04

60/083558 60/083554 60/083545 60/083499 60/083496 60/083495 60/083392

360

304

244 240 184

1998-04-29

FILING FILING DATE: APPLICATION PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

FILING DATE:

1998-04-29

1998-04-29

APPLICATION NUMBER: FILING DATE: 1998-0.
APPLICATION NUMBER:

1998-04-29

```
1385
                                                                                  1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1025
                                          1381
                                                                                                                                                                                                                                                1205
                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                                                    1141
                                                                                                                                                                                                                                                                                                                                                                                                             1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        305
                                                                                                                                                                                                                                                                                                                      ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
gytacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                          ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                 aatactttgggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                    ccaccaccaccaccaccaacagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | tccaaccaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gatgacaaaagactgattgaaggaaaggaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gactacgagtgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                             ccaccaccaccaccaccaccagcaatggcaaccaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                 gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tcaaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gatgacaaaagactgattgaaggaaaggaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                              aatactttgggggaaaagagttttaaaaaaagaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                      gaggtgagcaacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tecaacaagetgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcage
  1444
                                                                                                                                                                                                                                                                                                                                                                                                                                               1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        424
                                        1440
                                                                              1384
                                                                                                                      1380
                                                                                                                                                               1324
                                                                                                                                                                                                                                             1264
                                                                                                                                                                                                                                                                                                                          1204
                                                                                                                                                                                                                                                                                                                                                                                                           1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
                                                                                                                                                                                                                                                                                                                                                                  1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
```

B Qy g Qy DЬ ΩV 맑 20 Db QΥ Ъ QΥ g QΥ В γ 망 20 밁 γ 밁 Qy Ъ

δÃ Db Qy

61

نسو 6

gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct

atcaggaaagaaagaaagaaaaaaccgaacctgacaaaaaagaagaagaaaaagaaga 120 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct

Query Match Best Local Similarity Matches 1673;

98.1%; 99.9%;

Conservative

0; Mismatches Score 1661.4; DB 5; Pred. No. 1.6e-273;

Indels Length

Gaps

۳

65 60

1679; 1;

QΥ

Β̈́ Qy Вþ Qy B Qy DЬ Qγ Qγ

B δõ Db

B

```
; ORGANISM: Homo sapiens US-09-999-831A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-999-831A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Baketin, David
APPLICANT: Botsoyers, Luc
APPLICANT: Baton, Dan
APPLICANT: Periara, Napole
APPLICANT: Filvaroff, Elle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 522, Applic GENERAL INFORMATION:
                                       Prior Application removed - SEQ ID NO 522
LENGTH: 1679
                                                                                                                                 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C68
                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                     CURRENT APPLICATION NUMBER: US/09/999,831A CURRENT FILING DATE: 2002-03-25
                                                                                      NUMBER OF SEQ ID NOS: 624
                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441 ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccaagggctcagcctctctg 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcggggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                         Fong, Sucam
Gao, Wei-Qiang
                                                                                                                                                                             Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                           Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ferrara, Napoleon Filvaroff, Ellen
                                                                                                                                                                                                             Tumas, Daniel
                                                                                                                                                                                                                        Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                         Roy,
                                                                                                                                                                                                                                                                                                                               Kljavin,
                                                                                                                                                                                                                                                                                                                                               Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                           Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                         Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Botstein, David
                                                                                                                                                                                                                                                                                                    Napier
                                                                                                                                                                                                                                                                       Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application
                                                                                                                                                                                                                                                        Margaret Ann
                                                                                                                                                                                                                                                                                      James;
                                                                                                                                                                                                                                                                                                                    Sophia S.
                                                                                                                                                                                                                                                                       Nicholas F
                                                                                                                                                                                                                                                                                                  Mary A.
                                                                                                                                                                                                                                                                                                                                Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ψ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US/09999831A
                                                                        See File Wrapper or Palm
                                                                                                                                                                  and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1624
```

```
밁
                                 Ş
                                                                  밁
                                                                                                Qy
                                                                                                                                                               Q
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                  γQ
                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                        DЪ
                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
   1145
                                   1141
                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               485
                                                                                                                                                                                                                                                                                                                                        845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                                                                                                                                                                                                      965
                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                        905
                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                        785
                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
               ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaa&ggctgccg 1200
                                                                                                                                                   | tocaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acggggctggctctgtgtctctttccaaggagtgcccgtgcgcagcggayatgccacc
                                                                                  gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcttcttctggtc 1140
                                                                                                                                                                                                  tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc 1024
                                                                                                                                                                                                                    tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc 1020
                                                                                                                                                                                                                                                                     gatgacaaaagactgattgaaggaaaggaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                     gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                    aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                       aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                       accytyaactatccaccatacatttcayaagccaaggytacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                      accytyaactatccaccatacatttcayaagccaagyytacagytytccccytygyacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacc.aaacgcag 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga
ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctctcttctggtc
                                                                                                                                 tocaacaagetgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         424
                                                                                                                                 1084
                                                                                                                                                                                                                                                                     964
                                                                                                                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                                                                      904
                                                                                                                                                                                                                                                                                                                                                                                                     844
                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     244
```

```
US-09-999-829A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 522, Applic GENERAL INFORMATION:
SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                 APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I
TITLE OF INVENTION: Secreted and Transmembrane
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C61
CURRENT APPLICATION NUMBER: US/09/999,829A
                                                                                                                                                                                        APPLICANT:
APPLICANT:
                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                            APPLICANT:
                         NUMBER OF SEQ ID NOS: 624
                                       CURRENT FILING DATE:
                                                                                                                                                            APPLICANT:
                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1561
Ĭ
Prior Application removed - ID NO 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcggggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aatactttggggggaaaaagttttaaaaaaggaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ccaccaccaccaaccaccagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                      APPLICATION NUMBER: US/09/999,8297 FILING DATE: 2002-03-19
                                                                                                                                Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ashkenazi, Avi
                                                                                                                                                                                                                                                                                   Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                     Gurney,
                                                                                                                                                                                                                                                                                                                            Gerritsen,
                                                                                                                                                                                                                                                                                                                                         Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                       Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                      Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Baker Kevin
                                                                                                                                                                                                                                                           Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                    Fong,
                                                                                                                                                                                                                                                                                                                                                                                 Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                               Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                              Eaton,
                                                                                                                                                                                                                                                                                                                                                                                                                         Desnoyers, Luc
                                                                                                                                                                                         Paoni,
                                                                                                                                                                                                                 Napier, Mary A.
                                                                                                                                                                                                                                            Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09999829A
                                                                                                                                                                                                      James;
                                                                                                                                                                                                                                Sophia S.
                                                                                                                                                                                                                                                                                                                                                                    Sherman
                                                                                                                                                                                                                                                                                                                                                                                                            Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nicholas F
                                                                                                                                                                                                                                                                      Austin L.
                                                                                                                                                                                                                                                                                                                                                                                               Napoleon
                                                                                                                                                                                                                                                                                                                            Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ט'
                                                                                                                                                                                                                                                                                                                            Ħ
                                                                                                                                                                                                                                                           Ч
           See File Wrapper
                                                                                         Polypeptides
           or Palm
                                                                                            and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1444
```

```
; LENGTH: 1679
; TYPE: DNA
; ORGANISM: Homo s
US-09-999-829A-522
    밁
                         QY
                                                       망
                                                                              Qγ
                                                                                                            B
                                                                                                                                    δõ
                                                                                                                                                                  밁
                                                                                                                                                                                          QY
                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                           Д
                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                      ν
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Βb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
    905
                             901
                                                                                                                                                                  725
                                                                                                                                                                                             721
                                                                                                                                                                                                                        665
                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                            605
                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                  545
                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                            425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245
                                                                                                             785
                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                       485
                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            o,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                        accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                        atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcaggaaagaaagaaagaaaaaaccgaacctgacaaaaaagaagaagaaaagaagaaga
              gatgacaaaagactgattgaaggaaaggagaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                               gactacgagtgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtc
                                                                                                                                                                                ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                   atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                           attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                           attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                  cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                       tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga
gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                    aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                          accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                   ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                   cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                         tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1661.4; DB 5
Pred. No. 1.6e-273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124
 964
                            960
                                                    904
                                                                                                          844
                                                                                                                                    840
                                                                                                                                                               784
                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                           664
                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                    544
                                                                                                                                                                                                                                                                                                                                                                                                                                         484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                          780
                                                                                                                                                                                                                     724
                                                                                                                                                                                                                                                                                                                                604
                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
```

```
Qy
                                                                  멍
                                                                                             QΨ
                                                                                                                              B
                                                                                                                                                          δÃ
                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VΩ
                                                                                                                                                                                             밁
    1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                1505
                                                                                                                                                                                             1445
                                                                                                                                                                                                                                                              1385
                                                                                                                                                                                                                                                                                                                                                         1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                  1565
                                                                            1561 atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                          1325
                                                                                                                                                                                                                                                                                                                                                                                       1265
                                                                                                                                                                                                                                                                                                                                                                                                                       1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1205
                                                                                                                                                                                                            ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgttggcc
ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                        ggtacaatggagttttcttttcccaaacgggaagaacacaggcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                         aatactttggggggaaaaaagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                             cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                     ccaccaccaccaccaccaccaccagcaatggcaaccaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                           atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                            cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                          ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                         ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                        aatactttggggggaaaagagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                      ccaccaccaccaccaccaccaccaccagcaatggcaaccaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1260
                                                                                              1620
                                                                                                                                                             1560
                                                                                                                                                                                             1504
                                                                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                                                                          1384
                                                                                                                                                                                                                                                                                                                                                        1380
                                                                                                                                                                                                                                                                                                                                                                                       1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1024
                                                                                                                                1564
                                                                                                                                                                                                                                                           1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1204
```

US-09-978-375A-522 APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan
APPLICANT: Filvaroff, Elle Sequence 522, Application US/09978375A GENERAL INFORMATION: APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT: APPLICANT: APPLICANT: 8 Godowski, Paul J. Grimaldi, J. Chrisi Gurney, Austin L. Hillan, Kenneth J Kuo, Fong, Napier Kljavin, Ivar J. Gerritsen, Mary E. Goddard, Audrey Gerber, Hanspeter Ferrara, Napoleon Filvaroff, Ellen Desnoyers, Luc Botstein, David Sophia S. Wei-Qiang Sherman Mary Paul J. J. Christopher

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                      B
                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                맔
                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                   QΥ
                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                        DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-978-375A-522
 ď
                        Qγ
                                                    g
                                                                              Š
                                                                                                              В
                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 522
LENGTH: 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/978,375A CURRENT FILING DATE: 2002-04-19 Prior Application removed - See File Wrapp NUMBER OF SEQ ID NOS: 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Secreted and Transmembrane Polypeptides TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   185
                                                                                                                                                                                                                                                                                                                                                   305
                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
 665
                            661
                                                        605
                                                                                   601
                                                                                                                545
                                                                                                                                           541
                                                                                                                                                                         485
                                                                                                                                                                                                   481
                                                                                                                                                                                                                                 425
                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                           365
                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                         245
                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y Match
Local Similarity
hes 1673; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacaatct
                                                                                                                                                                                                                                                                                                       gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                       ttccccaaagctatggacaacgtgacggtccggcagggggagagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
               ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                    atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                            attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                               tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacaccttgctcggtg
                                                                                                                                                                                                                                                                                                                                                 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                        aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga
                                                                                                              attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                      cagacagacaaccaacagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                     cagacagacaacccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                        gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                      atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Williams, P. Mic
Wood, William I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1661.4;
Pred. No. 1.6e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .4; DB 5;
l.6e-273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۳.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124
                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                            480
                                                                                 660
                                                                                                                                                                        544
                                                                                                                                                                                                                                484
                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           184
 724
                           720
                                                      664
                                                                                                              604
                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
```

```
Qγ
                                                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                  Š
                                                                                                                                   B
                                                                                                                                                                 δÃ
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                ΩV
                                                                                                                                                                                                                                                                뫄
                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                    QУ
                                                                     밁
        밁
        1625
                                      1621
                                                                                                                                                                                                  1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1085
                                                                       1565
                                                                                                     1561
                                                                                                                                                                   1501
                                                                                                                                                                                                                                   1441
                                                                                                                                                                                                                                                                 1385
                                                                                                                                                                                                                                                                                               1381
                                                                                                                                                                                                                                                                                                                               1325
                                                                                                                                                                                                                                                                                                                                                             1321
                                                                                                                                                                                                                                                                                                                                                                                             1265
                                                                                                                                                                                                                                                                                                                                                                                                                          1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            785
                                                                                                                                                                                                                                                                                                                                            aatactttggggggaaaaagttttaaaaaagaaattgaaaaattgccttgcagatattta 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gaggtgagcaacggcacgtcgagggcgggcaggctgcgtctggctgctgcctcttctggtc 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                   actytyccaccacyycytyttytyaaacytyaaataaaaagaycaaaaaaaa 1675
                                                                                                                                                                                                                 ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                          ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tccaacaagctgggccaccaccaatgccagcatcatgctatttggtccaggcggccgtcagc 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                   atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                  cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                              ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                           ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gaggtgagcaacggcacgtcgaggagggcaggctgcgtcttggctgctcttcttggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcggcgtcagc 1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           accytyaactatccaccatacatttcayaayccaayyytacayytytccccytyyyacaa
actytyccaccacgycytytyttytyaaacgtyaaataaaaagagcaaaaaaaaa
                                                                    atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                   cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                             aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccaccaccaccaccaccaccaccagcaatggcaacaccgaccagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                               1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1024
                                                                       1624
                                                                                                     1620
                                                                                                                                   1564
                                                                                                                                                                    1560
                                                                                                                                                                                                    1504
                                                                                                                                                                                                                                                                 1444
                                                                                                                                                                                                                                                                                               1440
                                                                                                                                                                                                                                                                                                                               1384
                                                                                                                                                                                                                                                                                                                                                                                             1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              844
```

RESULT 9
US-09-978-423A-522
VS-09-978-423A-522
Sequence 522, Application US/09978423A
GENERAL INFORMATION:
APPLICANT: Baker Kevin P.
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David

```
PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078004
PRIOR PILING DATE: 1998-03-13
PRIOR PILING DATE: 1998-03-13
PRIOR APPLICATION NUMBER: 60/078886
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077641
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR FILING DATE: 1998-03-11
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Roy, Margaret Ann
APPLICANT: Shewitch, David L.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR ETLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
                                                                                  PRIOR PRIOR PRIOR PRIOR
                                                                                                                                                                           PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/079664
PRIOR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-03-
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-03-
PRIOR APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/978,423A CURRENT FILING DATE: 2002-05-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                 PRIOR
R APPLICATION NUMBER: (R FILING DATE: 1998-03-)
R APPLICATION NUMBER: (R APPLICATION NUMBER: (R APPLICATION NUMBER: (R FILING DATE: 1998-03-)
                                                                                      APPLICATION NUMBER: 6
FILING DATE: 1998-03-
                                                                                                                                 APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Napier, Mary A.
Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Paoni, Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Desnoyers, Luc
Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sherman
                                          NUMBER: 60/079728
1998-03-27
  NUMBER: 60/079786
1998-03-27
                                                                                                                                   1998-03-27
                                                                                                                                                                                                                                                                                                                                                             1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ivar J.
                                                                                         60/079663
-3-27
                                                                                                                                                                                                                                                                                                                                      60/078939
                                                                                                                                                                                                                                                                                                                                                                                60/078910
                                                                                                                                                          60/079689
                                                                                                                                                                                                                                               60/079656
                                                                                                                                                                                                                                                                                            60/079294
                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILLING LOSTE: 60/081952
PRIOR APPLICATION NUMBER: 60/081838
PRIOR APPLICATION NUMBER: 60/081838
PRIOR APPLICATION NUMBER: 60/081838
                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082700
PRIOR FILING DATE: 1998-04-22
                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-04-27 PRIOR APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1998-04-23
PRIOR APPLICATION NUMBER: 60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-04-27
PRIOR APPLICATION NUMBER: 60/082704
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/082568
PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/081819 PRIOR FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/081049
PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-0. PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-C
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-03-31 PRIOR APPLICATION NUMBER: 60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-03-3
                  PRIOR APPLICATION NUMBER: 60/083554
PRIOR FILING DATE: 1998-04-29
                                                 FILING DATE: 1998-04-29

**TTYNG DATE: 1998-04-29

**TTYNG DATE: 1998-04-29

**TTYNG DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/079920 FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/079923
                                                                                                                                                                                                                APPLICATION NUMBER: 60/083392
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083495
                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/
                                                                                                                                 APPLICATION NUMBER: 60/083499
                                                                                                                                                      FILING DATE:
                                                                                                                                                                             APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                         FILING DATE:
NUMBER: 60/083558
                                                                                                                                                   1998-04-29
                                                                                                                                                                                                  1998-04-29
                                                                                                                                                                                                                                                                                         1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/080327
                                                                                                                                                                                                                                                                                                                                                                                                        60/082796
                                                                                  60/083545
```

```
γQ
                                                                                                                                                          DЬ
                                                                                                                                                                                   Qy
                                                                                                                                                                                                              В
                                                                                                                                                                                                                                      20
 밁
                      QΥ
                                                   B
                                                                          200
                                                                                                       B
                                                                                                                                                                                                                                                                               Query
Best I
                                                                                                                                                                                                                                                                 Best Local Similarity Matches 1673; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OR APPLICATION NUMBER: 60/085338
OR FILING DATE: 1998-05-13
OR FILING DATE: 1998-05-13
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085582
OR FILING DATE: 1998-05-15
OR FILING DATE: 1998-05-15
 245
                          241
                                                    185
                                                                                                        125
                                                                                                                                 121
                                                                             181
                                                                                                                                                           66
                                                                                                                                                                                    61
                                                                                                                                                                                                              σ
                                                                                                                                                                                                                                                                                                                    R APPLICATION NUMBER: (
R FILING DATE: 1998-05
R APPLICATION NUMBER: (
R FILING DATE: 1998-05
                                                                                                                                                                                                                                                                                            Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083559
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083500
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-05 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-30
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/085689
                                                                                                    gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                 ttccccaaagctatggacaacgtgacggtccggccaggggggagagcgccaccctcaggtgc
                                                                                                                                                          atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaaagaagaaagaagaaga
                                                                                                                                                                                                              gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER: 60/
: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER: 60/084414
                                                                                                                                                                                                                                                                                                                       1998-05-15
                                                                                                                                                                                                                                                                                                                                                1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-06
                                                                                                                                                                                                                                                                              98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                            60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         _60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084366
                                                                                                                                                                                                                                                                                                                                  60/085697
                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                 Score 1661.4; DB 5;
Pred. No. 1.6e-273;
0; Mismatches 1;
                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                         Length 1679;
                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                           124
                                                                                                                                                                                                                                         60
 304
                        300
                                                   244
                                                                             240
                                                                                                       184
                                                                                                                                180
                                                                                                                                                                                                              65
```

1;

1380 1384	321 aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta 	Qу
1320 1324	1261 caaatgaaattagaagaaacacagcctcatgggacagaaatttgagggagg	Qy Db
1260 1264		Qу
1200 1204	1141 ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 	Qу
1140 1144	0 0	Qy Db
1080 1084	1021 techacaagetgggecacacchatgecageateatgetatttggtecaggegeegteage	Qy Db
1020 1024	961 tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc 	Qу
960 964	01 gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc 	Qy Db
900 904	41 aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag	Qy Db
840 844	1 accytyaactatccaccatacatttcayaayccaaygytacayytytccccytyygacaa	Qy Db
780 784	21 gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc 	Qy
720 724	61 ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg 	Оy
660 664	01 atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt 	Qy Db
600	41 attgtagagatttottoagatatotocattaatgaagggaacaatattagcotoacotgo 	Qy Db
540 544	81 cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa 	Qy Db
480 484	tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg	Qy Db
420 424	61 gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag	Qy Db
360 364	01 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct 	Qy Db

```
Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-013-921A-522
                                 PRIOR APPLICATION NUMBER: 09/91855
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-21
PRIOR FILING DATE: 1997-11-21
PRIOR FILING DATE: 1997-11-21
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 522, Application US/10013921A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                           CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                             CURRENT
                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: P2630P1C84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501 cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1561 atagagacgaacagaatgagaccttccggcccaagcgttggcgctgcgggcacttttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1441 ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1385 ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1445 ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
   APPLICATION NUMBER: 60/077641 FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggtacaatggagttttcttttcccaaacgggaagaacacaggcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/10/013,921A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gurney, Austin I
Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Goddard, Audrey
Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Paoni, Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Napoleon
                                                                                                                                                                                                                                                                                                           2002-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C,
                                                                                                                                                                                                                                                                                                                                                                                   and.
                                                                                                                                                                                                                                                                                                                                                                                   Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-27
PRIOR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/079663
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-0: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
                                                                                           PRIOR FILING DATE:
                                                                                                                               PRIOR FILING DATE:
                                                                                                                                                PRIOR APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/080328 PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1998-0: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/0 PRIOR FILING DATE: 1998-03-20
                                 APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/079923
                                                                                                                                                                    APPLICATION NUMBER: 60/081817 FILING DATE: 1998-04-15
                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/081071 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/078936 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/078004 FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/077791 FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/077649 FILING DATE: 1998-03-11
                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/078910
APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/080165
                 FILING DATE:
                                                                                                             APPLICATION NUMBER:
NUMBER: 60/082569
                                                                                           1998-04-15
                                                                                                                                                                                                          1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-27
                                                                                                                               1998-04-15
                                                                                                                                                                                                                                                1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-25
                   1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-3
```

60/081952

60/081955

60/080333

60/080334

60/080327 60/080194 60/080107 60/080105 60/079689

60/079656

60/078939

60/078886

FILING

1998-04-21

```
PRIOR

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                           OR APPLICATION NO.

'R FILING DATE:

'R APPLICATION NO.

'R APPLICATION NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                )R APPLICATION NUMBER: 60/08
PR FILLING DATE: 1998-04-29
SR APPLICATION NUMBER: 60/08
SR FILLING DATE: 1998-04-29
SR APPLICATION NUMBER: 60/08
SR FILLING DATE: 1998-04-29
SR FILLING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OR APPLICATION NUMBER: 60/08
R FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE: R APPLICATION NI
R FILING DATE: 1
R APPLICATION NI
R FILING DATE: 1
R APPLICATION NI
R FILING DATE: 1
R FILING DATE: 1
R APPLICATION NI
R FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                            R APPLICATION NI
R FILING DATE:
R APPLICATION NI
R FILING DATE:
R APPLICATION NI
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R APPLICATION NI
R FILING DATE:
R APPLICATION NI
R APPLICATION NI
R APPLICATION NI
R FILING DATE:
R FILING DATE:
R FILING DATE:
                                                                                                                                                                                                                                                                                                                          R FILING DATE:
R APPLICATION |
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R APPLICATION NI
R FILING DATE:
R APPLICATION NI
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R APPLICATION N
R FILING DATE:
R APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION | FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
APPLICATION N
                                                                                                                                                                            APPLICATION
FILING DATE
                                                                                                                                                                                                                 APPLICATION FILING DATE
                                                                                                                                                                                                                                                   APPLICATION I
                                                                                                                                                                                                                                                                                         APPLICATION
FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION I
FILING DATE:
                                                                                                                                                                                                                 DATE:
                                                                                                                                                                                                                                                                                         DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                            DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER: 60/0
a: 1998-05-05
                                                                       NUMBER: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER: 60: 1998-04-7
                                                        NUMBER:
                                                                                                                           NUMBER:
                                                                                                                                                             NUMBER:
                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                        NUMBER:
                                                                                                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                                                                                NUMBER: 60/1: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER: 60/
: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER: 60/
: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER: 60/0: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER:
                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-07
                                     1998-05-
                                                                                                            1998-05-15
                                                                                                                                              1998-05-15
                                                                                                                                                                                1998-05-15
                                                                                                                                                                                                                   1998-05-
                                                                                                                                                                                                                                                     1998-05-13
                                                                                                                                                                                                                                                                                         1998-05-
                                                                                                                                                                                                                                                                                                                              1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-22
   -05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : 60/084637
)5-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083742
                    60/085573
                                                                                                                           60/085689
                                                                                                                                                               60/085700
                                                                                                                                                                                                 60/085582
                                                                                                                                                                                                                                  60/085323
                                                                                                                                                                                                                                                                                                          60/085339
                                                                                                                                                                                                                                                                                                                                                                                 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                   60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/082704
                                                        60/085580
                                                                                                                                                                                                                                                                          60/085338
                                                                                                                                                                                                                                                                                                                                               60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /083499
```

```
Д
                      δõ
                                                                   QΥ
                                                                                              밁
                                                                                                                   δÃ
                                                                                                                                                                 δÃ
                                                                                                                                                                                           Вþ
                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                             γ
                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                   뭕
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QУ
                                               밁
                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
PRIOR
                                             845
                                                                                                                                                                                                                                                                                       545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
 905
                        901
                                                                                                                                                                                           665
                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                         605
                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                      485
                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                     425
                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                    365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                              785
                                                                                                                                            725
                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
les 1673; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R APPLICATION NUMBER: 60, R FILING DATE: 1998-05-15 R APPLICATION NUMBER: 60, R FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                          aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                       accytgaactatccaccatacatttcagaagccaagggtacaggttytccccytgggacaa
                                                                                                                                                       gactacgagtgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtc
                                                                                                                                                                                        atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                  attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                               tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                             gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atcaggaaagaaagaaagaaaaaaaaccgaacctgaccaaaaaagaagaagaagaagaaga
gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
           gatgacaaaagactgattgaaggaaaggaaaggggtgaaagtggaaacagacctttcctc
                                                                                           accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                         gactacgagtgcagtgcctccaatgacgtggccgccgccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                        atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                     attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                     cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                    tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                   gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                             aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1661.4;
No. 1.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; DB 6;
..6e-273;
hes 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                    840
                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                        604
                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                      544
                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                      484
                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                    424
                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
 964
                        960
                                               904
                                                                     900
                                                                                              844
                                                                                                                                            784
                                                                                                                                                                   780
                                                                                                                                                                                           724
                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲
```

Nucleic

```
RESULT 11
US-10-013-929A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                   Sequence 522,
                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                            APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
APPLICANT: Botstein, Dav
                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                       APPLICANT: APPLICANT:
                                                                                                                                                         APPLICANT: APPLICANT:
                                                                                                                                                                                           APPLICANT: APPLICANT:
                                                                                                                                                                                                                               APPLICANT:
        APPLICANT:
                       APPLICANT:
                                       APPLICANT:
                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                               1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcggggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aatactttggggggaaaaagttttaaaaaaggaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggtacaatggagttttcttttcccaaacgggaagaacacagccaccacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccaccaccaccaacaacaacaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacactttgcgttggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aatactttgggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ccaccaccaccacacacacacatgcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tecaacaagetgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                     Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
                                     Kljavin,
Kuo, Soph
                                                                                                                                                                                           Gao,
                                                                                                                                                                                                          Fong,
                                                                                                                                                                                                                        Ferrara, Napoleon
Filvaroff, Ellen
                                                                                                                                                         Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                              Baker Kevin P.
Botstein, David
     Napier,
Pan, Jar
                                                                                                                                                                                                                                                               Eaton, Dan
                                                                                                                                                                                                                                                                               Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                   Application US/10013929A
                                                                                                                                                                                             Wei-Qiang
        James
                                     7in, Ivar J.
Sophia S.
                                                                                                                                                                                                             Sherman
                     Mary A.
                                                                                                                                                                                                                                             Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR ELLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077791
PRIOR APPLICATION NUMBER: 60/07791
PRIOR APPLICATION NUMBER: 60/07804
PRIOR APPLICATION NUMBER: 60/078936
                                PRIOR
                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT FILING DATE: 2002-03-19
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C89 CURRENT APPLICATION NUMBER: US/10/013,929A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-03-26
APPLICATION NUMBER: 60/0
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/079294
FILING DATE: 1998-03-25
APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078939 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                        FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27
FILING DATE: APPLICATION N
                                                                                                                    APPLICATION NUMBER: 60/080165
FILING DATE: 1998-03-31
                                                                                                                                                      APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                              APPLICATION NUMBER: 60/080328
                                                FILING DATE:
                                                                   APPLICATION
                                                                                  FILING DATE:
                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                            APPLICATION
                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                              APPLICATION
                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                    APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tumas, Daniel
Tiams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wood,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Roy, Margaret
Shelton, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Paon1,
 NUMBER: 60/080333
                                              NUMBER: 60/
: 1998-04-01
                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                          NUMBER:
                                                                                                                                                                                                                                                                                                          NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nicholas
                                                                                                                                                                                        1998-03-31
                   1998-04-01
                                                                                                                                                                                                                                                                                          1998-03-27
                                                                                                                                                                                                                                                                                                                                                                1998-03-27
                                                                                1998-03-31
                                                                                                                                                                                                                          1998-03-30
                                                                                                                                                                                                                                                            1998-03-30
                                                                                                                                                                                                                                                                                                                            1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , David L.
, Timothy A.
                                                                                                    60/080194
                                                                                                                                                                                                        60/080105
                                                                                                                                                                                                                                        60/079923
                                                                                                                                                                                                                                                                          60/079920
                                                                                                                                                                                                                                                                                                            60/079786
                                                                                                                                                                                                                                                                                                                                          60/079728
                                                                                                                                                                                                                                                                                                                                                                            60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ann
```

PRIOR PRIOR PRIOR PRIOR PRIOR

```
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-1
PRIOR APPLICATION NUMBER: 6
PRIOR PRILING DATE: 1998-04-1
PRIOR PRILING DATE: 1998-04-1
PRIOR PRILING DATE: 1998-04-1
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-1
PRIOR PRIOR PRILING DATE: 1998-04-1
PRIOR APPLICATION NUMBER: 6
PRIOR APPLICATION NUMBER: 6
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-1
PRIOR PRIOR PRIOR DATE: 1998-04-1
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-1
PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-1
PRIOR FILING DATE: 1998-04-1
PRIOR FILING DATE: 1998-04-1
PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR PRIOR
TOR APPLICATION NUMBER: 60/08
TOR APPLICATION NUMBER: 60/084
TOR APPLICATION NUMBER: 60/084
TOR FILING DATE: 1998-05-07
TOR APPLICATION NUMBER: 60/084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081817
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081819
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081952
OR FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                        OR APPLICATION NUMBER: 60/08
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OR APPLICATION NUMBER: 60/08
R FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OR FILING DATE: 1998-04-23
NR APPLICATION NUMBER: 60/08
PR EFILING DATE: 1998-04-27
OR APPLICATION NUMBER: 60/08
REFILING DATE: 1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R FILING DATE: 1998-04-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-
R FILING DATE: 1998-04-
R FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/082569
FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/081049
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081071
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/1
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/
                                                       NUMBER: 60/084637: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                      1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-08
                                                                                                                                                                                            1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/083336
14-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083495
                                     60/084639
                                                                                                                        60/084441
                                                                                                                                                                     60/084414
                                                                                                                                                                                                                 60/084366
                                                                                                                                                                                                                                                           60/083742
                                                                                                                                                                                                                                                                                                       60/083500
                                                                                                                                                                                                                                                                                                                                                   60/083559
                                                                                                                                                                                                                                                                                                                                                                                             60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/080334
                                                                                                                                                                                            -05
                                                                                                                        В
                                                                                                                                                                Š
                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                            ΩV
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΩУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                          245
                                  485
                                                                                                                        425
                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125
                                                                            481
                                                                                                                                                                421
                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                    305
                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / Match
Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DR FILING DATE: 1998-05-07
DR APPLICATION NUMBER: 60/08
BR FILING DATE: 1998-05-13
BR FILING DATE: 1998-05-13
BR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-05-13
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-05-15
DR APPLICATION NUMBER: 60/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R FILING DATE:
R APPLICATION N
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084627
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                 gggaatgacaagtggtgccttggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                     actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaagaagaagaaaaaagaagaaga 120
                                                     cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                           tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                               ttccccaaagctatggacaacgtgacggtccggcagggggagagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaaaaaagaagaaga
                              cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                          gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                        tacagcategagateeagaacgtggatgtgtatgacgagggeeettacacetgeteggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER: 60/
: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER: 60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1661.4; DB 6
Pred. No. 1.6e-273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6;
```

Indels Length

1:

1679; بــر •• Gaps

PRIOR PRIOR PRIOR PRIOR PRIOR

R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N

NUMBER: NUMBER:

484

480 424 420

364 360 304 300 244 240 184

PRIOR

PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR

APPLICATION

NUMBER:

B

1679

```
1621
                                                                                                                                                                                                                                 1385
                                                                                                                                                                                                                                                               1381
                                                                                                                                                                                                                                                                                               1325
                                                                                                                                                                                                                                                                                                                             1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1025
                                   1565
                                                                                                   1505
                                                                                                                                                                                               1441
                                                                                                                                                                                                                                                                                                                                                                                                                              1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     545 attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                         aatactttggggggaaaaaagttttaaaaaagaaaattggaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                          ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                              ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccaagggctcagcctctctg
                                                                                                                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                           aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                            tccaacaagctgggccacaccaatgccagcatcatgctatttggtccagggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            accetegaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gactacgagtgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atagcaactggtagaccagagcctacggttacttggagacacatctctccccaaagcggtt
                               atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                    atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                              cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                         gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcggccgtcagc
                                                               1620
                                                                                                                                                                                                                                                                                             1384
                                                                                                                                                                                                                                                                                                                          1380
                               1624
                                                                                                                             1560
                                                                                                                                                                                             1500
                                                                                                                                                                                                                             1444
                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                                                                                                         1324
                                                                                                                                                                                                                                                                                                                                                                                         1320
                                                                                                                                                                                                                                                                                                                                                                                                                         1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1020
                                                                                              1564
                                                                                                                                                             1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
```

В

Qy В Qy B Ş Db ρy DЪ δÃ B γ 밁 Qy В Qy 밁 Qy B Qγ Ď, Qy B γ B δÃ 밁 QY В Š

```
FILE REFERENCE: P2630PIC77
CURRENT APPLICATION NUMBER: US/10/013,918A
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-013-918A-522
                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Ashkenazi, i
APPLICANT: Baker Kevin
APPLICANT: Botstein, I
APPLICANT: Desnoyers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 522, Applic GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: APPLICANT:
                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
                                                                                                                            APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078936
                                                                                                                                                                                FILING DATE: 1998-03-12
APPLICATION NUMBER: 60/
FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/066364
FILING DATE: 1997-11-21
                                              APPLICATION NUMBER: 60/0
FILING DATE: 1998-03-20
                                                                             APPLICATION |
FILING DATE:
                                                                                                                                                                                                                                                   FILING DATE: 1998-03-
FILING DATE:
APPLICATION
                                                                                                                FILING DATE: 1998-03-20
                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/077791
                                APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Godowski,
Grimaldi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eaton, Da
Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/10013918A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wei-Qiang
                               NUMBER:
                                                                             NUMBER: 60/1: 1998-03-20
 NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dan
                 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Timothy A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paul J.
J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         שי
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J.
                               60/079294
                                                              60/078939
                                                                                               60/078910
                                                                                                                                                                                                 60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic
```

```
PRIOR APPLICATION NUMBER: 60/080333
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/080334
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/081070
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/00
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/00
PRIOR APPLICATION NUMBER: 40/00
PRIOR APPLICATION NUMBER: 60/00
PRIOR PRICATE: 1998-04-21
PRIOR FILING DATE: 1998-04-21
                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                     PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/081819
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081071
PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OR APPLICATION NUMBER: 60/080107
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080165
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080194
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080327
OR APPLICATION NUMBER: 60/080327
OR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OR APPLICATION NUMBER: 60/081229
OR FILING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081955
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081817
OR FILING DATE: 1998-04-15
OR FILING DATE: 1998-04-15
                                                                   OR APPLICATION NUMBER: (
OR FILING DATE: 1998-04-
OR APPLICATION NUMBER: (
OR FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OR APPLICATION NUMBER: (
OR FILING DATE: 1998-03-
OR APPLICATION NUMBER: (
OR FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R FILING DATE:
R APPLICATION N
                                                                                                                                                                                              RAPPLICATION NUMBER: 60/082704
FILLING DATE: 1998-04-22
RAPPLICATION NUMBER: 60/082804
FILLING DATE: 1998-04-22
RAPPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/081195
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
                                                                                                                                            FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082797
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/080105 FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/079920 FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/079728
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079786
FILING DATE: 1998-03-27
APPLICATION
FILING DATE
                                  APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DATE: 1998-03-
                   NUMBER: 60/083392
                                                                     1998-04-27
                                                                                                          1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-26
   1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-03-27
                                    1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-
                                                  60/083322
                                                                                        60/083336
                                                                                                                           60/082796
                                                                                                                                                                                                                                                                                                                60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/079664
                                                                                                                                                                                                                                                                                                                                                   60/082568
                                                                                                                                                                                                                                                                                                                                                                                        60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /079689
```

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/084414
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60//
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60//
PRIOR FILING DATE: 1998-04-29
                                                                                             PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/085338
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/083545
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                           PRIOR FILING DATE: 1998-05-15-
PRIOR APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1998-05
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/084643 PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-09
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-05-07 PRIOR APPLICATION NUMBER: 60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-04-30 PRIOR APPLICATION NUMBER: 60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/083500 PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/083495
                                                                                                                                                                                                                                                                                                           OR AFILING DATE: 1998-U5-L5

OR APPLICATION NUMBER: 60/085

OR APPLICATION NUMBER: 60/08

OR APPLICATION NUMBER: 60/08

OR APPLICATION NUMBER: 60/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/085580
                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER: 60/084627
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-07
                         98.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083558
                                                                                                                                                                                                           60/085573
                                                                                                                                                                                                                                                                                                                                                                                          60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084637
                                                                                                                                                                                                                                                                                                                                                60/085689
Score 1661.4; DB 0;
Pred. No. 1.6e-273;
""smatches 1;
```

```
Qy
    밁
                                                           B
                                                                                       δõ
                                                                                                                    Matches 1673; Conserv
   66
                              62
                                                                        gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 124
               atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 120
                                                       gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                    Conservative
                                                                                                                   0,
                                                                                                                   Indels
                                                                                                                 1;
                                                                                                                   Gaps
                                                          65
                                                                                       60
                                                                                                                   ٠.
```

Best

Local

DB 6;

Length 1679;

```
B
                                                                                                                                     Qy
                                                                                                                                                                        Dþ
                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                      DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                 Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
Ž
                                    밁
                                                                δÃ
   1201
                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                    905
                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                        845
                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                            785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctcttgggcaatcttc
                                                                                                                                                                                                                                                                tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacactttgcgtggcc
                                                                                                                                                                                                                                                                                                                                   gatgacaaaagactgattgaaggaaaggaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                        aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccc@aacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gggaatgacaagtggtgcctggatccttcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acggggctggctgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggassatgccacc
                                                     ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                          gaggtgagcaacggcacgtcgaggagggcaggctgcttggttgctgctgcttcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gactacgagtgcagtgcctccaatgacgtggccgcgcgccgtggtacggagagagtaaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ggctttgtgagtgaagacgaatacttggaaaattcagggcatcacccggggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cagacagaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
 ccaccaccaccaacaacaacagcaatggcaacaccgacagcaaccaatcagatatata
                                  ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                    tecaacaagetgggecacaccaatgecageatcatgetatttggtecaggegeegteage
                                                                                                                                                                                              tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                              tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                  gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                      aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                          accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctyctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                        1144
                                                                                                                                                                            1084
                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                1024
                                    1204
                                                                       1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                            844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                184
   1260
                                                                                                                                                                                                                                                                                   1020
                                                                                                                                                                                                                                                                                                                    964
                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                        904
                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
```

QΥ

Q Db Qy DЬ δÃ 밁 20 Вþ QΨ Дb QY Β̈́ Qy 밁 δÃ 밁 200

Qy

QΨ

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ζ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
US-10-017-082A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 522,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Ashkenazi,
APPLICANT: Baker Kev
APPLICANT: Botstein,
                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                     CURRENT APPLICATION NUMBER: US/10/017,082A CURRENT FILING DATE: 2002-03-25 PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
           PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                 FILE REFERENCE: P2630P1C71
                                                                                                             TITLE OF INVENTION: Secreted and Transmembrane TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                         APPLICANT:
                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aatactttgggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                         Wood, William I
                                                                                                                                                     Tumas, Daniel
Williams, P. Mickey
                                                                                                                                                                             Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                             Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                       Goddard, Audrey Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                             Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                           Fong,
                                                                                                                                                                                                                                                                                                                         Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                   Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                          Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Botstein, David
                                                                                                                                                                                                                                                                   Kuo, Sophia S
                                                                                                                                                                                                                                                                                Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Baker Kevin
                                                                                                                                                                                                                           Paoni,
                                                                                                                                                                                                                                                    Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/10017082F
                                                                                                                                                                                                                                        James;
NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                            Sherman
                                                                                                                                                                                                                           Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                        Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Avi
                                                                                                                                                                                                                                                                                                                                                                                                                           Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ש
60/064249
                                                                                                            Encoding
                                                                                                                          Polypeptides
                                                                                                                            and
                                                                                                                             Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1620
```

FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER:	PRIOR APPLICATION NUMBER: 60/080105 PRIOR FILING DATE: 1998-03-31 PRIOR APPLICATION NUMBER: 60/080194 PRIOR APPLICATION NUMBER: 60/080327 PRIOR APPLICATION NUMBER: 60/080327 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080328 PRIOR APPLICATION NUMBER: 60/080333 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080333 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080334 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080334 PRIOR FILING DATE: 1998-04-01			FILING DATE: 1997-11- APPLICATION NUMBER: 6 FILING DATE: 1997-11- APPLICATION NUMBER: 6 FILING DATE: 1997-11- APPLICATION NUMBER: 6 FILING DATE: 1998-03-
		•		
PRIOR PILING DATE: 1998-05-07 PRIOR APPLICATION NUMBER: 60/084600 PRIOR FILING DATE: 1998-05-07 PRIOR PILING DATE: 1998-05-13 PRIOR APPLICATION NUMBER: 60/085339 PRIOR APPLICATION NUMBER: 60/085338 PRIOR APPLICATION NUMBER: 60/085338 PRIOR APPLICATION NUMBER: 60/085338 PRIOR APPLICATION NUMBER: 60/085333 PRIOR APPLICATION NUMBER: 60/085323 PRIOR FILING DATE: 1998-05-13 PRIOR APPLICATION NUMBER: 60/085582	FILING APPLIC FILING APPLIC FILING FILING APPLIC FILING APPLIC FILING APPLIC FILING APPLIC FILING	APPLICATION FILING DATE APPLICATION APPLICATION APPLICATION	APPLICATION N FILING DATE: APPLICATION N	PRIOR APPLICATION NUMBER: 60/081817 PRIOR FILING DATE: 1998-04-15 PRIOR FILING DATE: 1998-04-15 PRIOR APPLICATION NUMBER: 60/081819 PRIOR APPLICATION NUMBER: 60/081952 PRIOR APPLICATION NUMBER: 60/081952 PRIOR APPLICATION NUMBER: 60/082568 PRIOR APPLICATION NUMBER: 60/082568 PRIOR APPLICATION NUMBER: 60/082569 PRIOR FILING DATE: 1998-04-21 PRIOR APPLICATION NUMBER: 60/082704 PRIOR FILING DATE: 1998-04-22 PRIOR FILING DATE: 1998-04-22 PRIOR APPLICATION NUMBER: 60/082704 PRIOR APPLICATION NUMBER: 60/082704 PRIOR APPLICATION NUMBER: 60/082704 PRIOR APPLICATION NUMBER: 60/082704 PRIOR APPLICATION NUMBER: 60/082700 PRIOR FILING DATE: 1998-04-22 PRIOR PRIOR PRIOR DATE: 1998-04-22 PRIOR P

```
Ωy
                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                         Qy
 Qy
                              B
                                                       δÃ
                                                                                      B
                                                                                                                 Qy
                                                                                                                                               B
                                                                                                                                                                       QΥ
                                                                                                                                                                                                       B
                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                               Ъ
                                                                                                                                                                                                                                                                                                                                                 δδ
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                         545
    781
                                                                                       565
                                                                                                                  661
                                                                                                                                                 605
                                                                                                                                                                            601
                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                               485
                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                        425
                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                               365
                                                                                                                                                                                                                                                                                                                                                                                                                                        305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                125
                               725
                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
mes 1673; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/085573
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085704
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085580 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/085579
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085689 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING
                                                                                                                                              atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                             atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                      attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                     attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                          cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                        tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacaccttgctcggtg
                                                                                                                                                                                                                                                                                                                                                                             gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                            gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acggggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaagaagaagaaaaagaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gactacgagtgcagtgcctccaatgacgtggccgcgcgtggtacggagagtaaaggtc
                                                                                 ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                               cagacagacaaccaacagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                     tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                       actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaagaagaaga
accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                 ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                            gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1661.4; DB 6; Length Pred. No. 1.6e-273; O; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124
 840
                                                                                                                                                                                                                                                               544
                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                             424
                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                184
                              784
                                                       780
                                                                                                                 720
                                                                                                                                              664
                                                                                                                                                                         660
                                                                                                                                                                                                      604
                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                       484
                                                                                                                                                                                                                                                                                                                                                                                                                                       364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                      724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     سر
۰۰
```

```
Qy
                                                                     밁
                                                                                                 Qγ
                                                                                                                                   밁
                                                                                                                                                             Ωy
                                                                                                                                                                                              밁
                                                                                                                                                                                                                          QY
                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                       δ.
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
        1625
                                     1621
                                                                     1565
                                                                                                                                   1505
                                                                                                                                                                                                1445
                                                                                                                                                                                                                                                           1385
                                                                                                                                                                                                                                                                                                                          1325
                                                                                                                                                                                                                                                                                                                                                                                       1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               785
actytyccaccacygcytytyttytyaaacytyaaataaaaagaycaaaaaaaaa 1675
                                                                                                                                                cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                             ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                     aatactttygygygaaaaagttttaaaaaagaaattgaaaattyccttycagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag 900
                                                                                                                                                                                                                                                                                                                      aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                  caaatgaaattagaagaaacacagcctcatgggacagaatttgaggggagggggaacaaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                 atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                  atagagaccgaacagaatgagaccttccggcccaagcgtggcgctgcggggcactttggtag
                                                                                                                                                                                             ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                          ggtacaatggagttttcttttcccaaacgggaagaacacaccagcaccccggcttggaccca
                                                                                                                                                                                                                                                                        ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                  ccaccaccaccaccaccaccaccagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttcttggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1384
                                                                                                                                                                                                                                                                                                                                                                                                                    1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    904
                                                                                                                                                                                                                              1500
                                                                                                                                                                                                                                                           1444
                                                                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                                                                                                      1380
                                                                                                                                                                                                                                                                                                                                                                                     1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 844
                                                                     1624
                                                                                                                                     1564
                                                                                                                                                                                                1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    964
                                                                                                      1620
```

```
US-10-119-480-125

Sequence 125, Application US/10119480

Sequence 125, Application US/10119480

SEMERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Goddard, Audrey

APPLICANT: Goddwrki, Paul J.

APPLICANT: Godowski, Paul J.

APPLICANT: Gurney, Austin L.

APPLICANT: Smith, Victoria

APPLICANT: Smith, Victoria

APPLICANT: Swith J.

APPLICANT: Wattanabe, Colin L.
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
              QУ
                                                                     Qy
                                                                                                     В
                                                                                                                                 γQ
                                                                                                                                                                   뫄
                                                                                                                                                                                            Qy
                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                           QУ
                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-119-480-125
                                              Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 125
LENGTH: 1679
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/119,480
CURRENT FILING DATE: 2002-04-09
NUMBER OF SEO ID NOS: 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: WOOd, William I.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3530PlC1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo Sapien
                                              725
                                                                                                        665
                                                                                                                                      661
                                                                                                                                                                    605
                                                                                                                                                                                                   601
                                                                                                                                                                                                                                545
                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                               485
                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                         425
                                                                                                                                                                                                                                                                                                                                                                                                                        365
                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                781
                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 1673; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prior
accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                   atagcaactggtagaccagagcctacggttacttggagacacatctctccccaaagcggtt
                                                                                                                                                                                                                                               attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                              cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                     gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacaatct 60
                                                          ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                   atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                             cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                        tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                           gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                     ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                   gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                         tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1661.4; DB 6
Pred. No. 1.6e-273;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٥ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.
                                                                                                       724
                                                                                                                                                                    664
                                                                                                                                                                                                                                604
                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                         484
                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         184
                                             784
                                                                          780
                                                                                                                                                                                                                                                                                             544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>ب</u>
```

```
δÃ
                         QY
                                                       밁
                                                                           Qy
                                                                                                         B
                                                                                                                                δÃ
                                                                                                                                                           В
                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                        ρb
                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                   29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                           1445
                                                                                                                                                                                      1441
                                                                                                                                                                                                                1385
                                                                                                                                                                                                                                                                   1325
                                                                                                                                                                                                                                                                                                                       1265
                                                                                                                                                                                                                                                                                                                                                                           1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
    1625
                                                                                                          1505
                                                                                                                                                                                                                                          1381
                                                                                                                                   1501
                                                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                     ccaccaccaccaccacacacagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
               atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                  cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                       ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacaggcacacccggcttggaccca
                                                                                                                                                                                                                                                                               aatactttggggggaaaaagttttaaaaaaagaaattgaaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                  ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggcttgctgcttcttggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                       cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                          ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                               ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                  aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                     ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tocaacaagetgggeeacaecaatgeeageateatgetatttggteeaggegeegteage
     1679
                              1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                844
                                                                                                           1564
                                                                                                                                    1560
                                                                                                                                                              1504
                                                                                                                                                                                      1500
                                                                                                                                                                                                                  1444
                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                      1384
                                                                                                                                                                                                                                                                                              1380
                                                                                                                                                                                                                                                                                                                                                  1320
                                                                                                                                                                                                                                                                                                                                                                           1264
                                                                                                                                                                                                                                                                                                                                                                                                     1260
                                                                                                                                                                                                                                                                                                                                                                                                                               1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              904
                                                                                 1620
                                                                                                                                                                                                                                                                                                                          1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
```

```
Sequence 375, Application:
                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                              APPLICANT: Baker, Kevin P. APPLICANT: Beresini, Maur
                                       Filvaroff, Ellen
Gao, Wei-Qiang
Gerritsen, Mary E.
 Gurney, Austin
                            Goddard, Audrey
             Godowski, Paul
                                                                                                 DeForge, Laura
                                                                                                                Beresini, Maureen
```

RESULT 15 US-10-121-049-375

Application US/10121049

```
CURRENT APPLICATION NUMBER: US/10/121,049

CURRENT FILING DATE: 2002-04-12

Prior Application removed - See File Wrapper

NUMBER OF SEQ ID NOS: 550

SEQ ID NO 375

SEQ ID NO 375

LENGTH: 1679

TYPE: DNA

CRGANISM: Homo Sapien

US-10-121-049-375
                                                                                                                                                                                                                                                                                                        Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                           Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
 밁
                            20
                                                             В
                                                                                      γ
                                                                                                                       밁
                                                                                                                                                  Qy
                                                                                                                                                                                  Дb
                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                 멼
                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ΩУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 98.1%;
Best Local Similarity 99.9%;
Matches 1673; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                               425
                                                                                                                                                                                                                                                                                                        365
   665
                                 661
                                                               605
                                                                                           601
                                                                                                                          545
                                                                                                                                                       541
                                                                                                                                                                                     485
                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                  305
                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                             245
                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      σ
                                                                                                                    actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaagaagaagaaaaagaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg
                                                          atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                             atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                   cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                            tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                             tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacaccttgctcggtg 480
                                                                                                                                                                                                                                                                                                      gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                     gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                  actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                           ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                            ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 65
ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stewart, Timothy A. Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2hang, Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sherwood, Steven Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1661.4; DB 6;
Pred. No. 1.6e-273;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Gaps
 724
                                                             664
                                                                                                                         604
                                                                                                                                                                                  544
                                                                                                                                                                                                                540
                                                                                                                                                                                                                                              484
                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                               720
                                                                                           660
                                                                                                                                                                                                                                                                                                         424
                                                                                                                                                                                                                                                                                                                                                                  364
                                                                                                                                                                                                                                                                                                                                                                                                                             304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
```

	actgtgccaccacggcgtgtgttgtgaaacgtgaaataaaaagagcaaaaaaaa	1621 1625	Db Db
1620	atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag	1561	Qy
1624		1565	Db
1560	cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc	1501	Qy
1564		1505	Db
1500	otgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg	1441	Qy
1504		1445	Db
1440 1444	gytacaatgyayttttcttttcccaaacgygaagaacacagcacacccggcttgyaccca	1381 1385	Оy
1380	aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta	1321	Оу
1384		1325	
1320 1324	caaatgaaattagaagaaacacagcctcatgggacagaaatttgagggagg	1261 1265	Оу
1260	ccaccaccaccaccaccaccaccaccagcaatygcaacaccgacagcaacccaatcagatatata	1201	Qy
1264		1205	Db
1200 1204	ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg	1141 1145	Db Qy
1140	gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctqctqctcttctggtc	1081	Qy
1144			Db
1080	tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc	1021	Qy
1084		1025	Db
1020	tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc	961	Qy
1024		965	Db
960	gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc	901	Qy
964		905	Db
900	aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag	841 845	Qy Db
840	accgtyaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa	781	Qy
844		785	Db
780 784	gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc	721 725	Qу

Search completed: July 12, 2002, 00:32:57 Job time: 11080 sec

```
Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
                 July 12, 2002, 00:25:10 ; Search time 5033.45 Seconds (without alignments) 7276.880 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-700-397-2
1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IDENTITY_NUC
Gen2_6/ptodata/2/pna/US095_COMB.seq:*
(cgn2_6/ptodata/2/pna/US085_COMB.seq:*
(cgn2_6/ptodata/2/pna/US086_COMB.seq:*
(cgn2_6/ptodata/2/pna/US086_COMB.seq:*
(cgn2_6/ptodata/2/pna/US089_COMB.seq:*
(cgn2_6/ptodata/2/pna/US090_COMB.seq:*
(cgn2_6/ptodata/2/pna/US090_COMB.seq:*
(cgn2_6/ptodata/2/pna/US092_COMB.seq:*
(cgn2_6/ptodata/2/pna/US093_COMB.seq:*
(cgn2_6/ptodata/2/pna/US095A_COMB.seq:*
(cgn2_6/ptodata/2/pna/US095B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US095B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US095B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US095B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US095B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US096C_COMB.seq:*
(cgn2_6/ptodata/2/pna/US096B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US096B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US096B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US096C_COMB.seq:*
(cgn2_6/ptodata/2/pna/US097B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US099B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US099B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US099B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US099B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US099B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US099B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US099B_COMB.seq:*
(cgn2_6/ptodata/2/pna/US0000_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pending_Patents_NA_Main: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21979536 seqs, 10817449327 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /cgn2_6/ptodata/2/pna/US083_COMB.seq:*
/cgn2_6/ptodata/2/pna/US084_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /cgn2_6/ptodata/2/pna/US082_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/2/pna/US080_COMB.seq:*
/cgn2_6/ptodata/2/pna/US081_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/2/pna/US06_COMB.seq:*
/cgn2_6/ptodata/2/pna/US07_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cgn2_6/ptodata/2/pna/PCTUS_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             _COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43959072
```

```
44: /cgn2_6/ptodata/2/pna/US6005_COMB.seq:*
45: /cgn2_6/ptodata/2/pna/US6006_COMB.seq:*
46: /cgn2_6/ptodata/2/pna/US6008_COMB.seq:*
47: /cgn2_6/ptodata/2/pna/US6008_COMB.seq:*
48: /cgn2_6/ptodata/2/pna/US6010_COMB.seq:*
49: /cgn2_6/ptodata/2/pna/US6011_COMB.seq:*
50: /cgn2_6/ptodata/2/pna/US6012_COMB.seq:*
51: /cgn2_6/ptodata/2/pna/US6012_COMB.seq:*
52: /cgn2_6/ptodata/2/pna/US6013_COMB.seq:*
53: /cgn2_6/ptodata/2/pna/US6014_COMB.seq:*
54: /cgn2_6/ptodata/2/pna/US6015_COMB.seq:*
55: /cgn2_6/ptodata/2/pna/US6016_COMB.seq:*
57: /cgn2_6/ptodata/2/pna/US6016_COMB.seq:*
58: /cgn2_6/ptodata/2/pna/US6018_COMB.seq:*
59: /cgn2_6/ptodata/2/pna/US6019_COMB.seq:*
60: /cgn2_6/ptodata/2/pna/US6010_COMB.seq:*
61: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
62: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
63: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
64: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
65: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
66: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
67: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
68: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
69: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
70: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*
71: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
72: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
73: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
74: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
75: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
76: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
77: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
76: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
77: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
76: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
77: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

N

```
NAME/KEY: CDS
LOCATION: (130)...(1161)
NAME/KEY: Sig_Peptide
LOCATION: (130)...(213)
NAME/KEY: mat_peptide
LOCATION: (214)...()
US-09-700-397-2
                                                                                                                                                                                                            B
                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                D;
                               δÃ
                                                                                                δõ
                                                                                                                                       Вþ
                                                                                                                                                                     γ
                                                                                                                                                                                                                                                                                                              Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           us-09-700-397-2
                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2, Application US/09700397 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE:
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: Q61459
CURRENT APPLICATION NUMBER: US/09/700,397
CURRENT FILING DATE: 2001-01-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: One Phaz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: PCT, PRIOR FILING DATE: 1999-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Clone OC001 derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 1693
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                      181
                                                                                                                                           121
                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                       Local Sir
hes 1693;
241
                                                                    181
                                                                                                                                                                                                              61
                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1661.4
1661.4
1661.4
1661.4
1661.4
1661.4
1661.4
1661.4
1661.4
1661.4
1661.4
1661.4
                                                                                                                                                                                                                                                                                                   gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                       acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                           aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                                                                                                               atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaagaagaaaaaagaagaaga
                                                                                                                                                                                                                              atcaggaaagaaagaaagaaaaaaaccgaacctgaccaaaaaaagaagaagaaaagaagaaga
                                                                                                                                                                                                                                                                                  gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacaatct
                                                                                                                                       aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
acggggctggctgtctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ono Pharmaceutical Co., Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       998.......
                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N: Novel Polypeptides, cDNA
Q61459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-14
                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 1693; DB 28; 100.0%; Pred. No. 2.6e-241;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         37
37
37
37
37
37
37
37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JP 10-131815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT/JP99/02485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-017-191A-522

US-10-020-445A-522

US-10-026-072-375

US-10-066-193-103

US-10-066-198-103

US-10-066-203-103

US-10-066-211-103

US-10-066-269-103

US-10-066-273-103

US-10-066-273-103

US-10-066-273-103

US-10-066-5500-103

US-10-066-5500-103

US-10-081-056-55

US-09-944-511-5

US-09-945-212-5
                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          encoding the
                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         brain
                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          same, and use
                                                                                                                                                                                                                                                                                                                                                                                            1693;
                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       522, App
375, App
103, App
104, App
105, App
107, App
108, App
109, App
109
                                                                                                                                                                                                               120
                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                             180
 300
                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of
                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                      QΨ
                                                                                                                                                             밁
                                                                                                                                                                                           QV
                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Βþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                         1261
                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                   1141
                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tacagcatcgagatccagaacgtggatgtgtatgacgaggggcccttacacctgctcggtg
                                                                                                                                                                                                                                                 ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                    gaggtgagcaacggcacgtcgaggagggcaggctgctgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                        tocaacaagotgggocacaccaatgccagcatcatgctatttggtccaggcggccgtcagc 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gactacgagtgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gactacgagtgcagtgcctccaatgacgtggccgcgccccytggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                aatactttggggggaaaaaagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                 aatactttggggggaaaaagtttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                            ccaccaccaccaccaccaacaacagcaatggcaacaccgacagcaaccaatcagatatata 1260
                                                                                                                                                                                                                                                                                                                                                                        tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                       caaatgaaattagaagaaacacagcotcatgggacagaaatttgagggaggggaacaaag 1320
                                                                                                                                                           ccaccaccaccaccaccaccaccagcaatggcaacaccgaccagcaaccaatcagatatata
                                                                                                                                                                                                                              ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                 gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                              tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                    1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
```

```
Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2
US-09-380-138-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 522,
                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1
                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1
                                                                                                                                                                                                                                      PRIOR FILING DATE: 1
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                          PRIOR FILING DATE: PRIOR APPLICATION
                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: P2630R1E
CURRENT APPLICATION NUMBER: US/09/380,138
                                                                                                                                     PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1
                                                                                                                                                           PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1
                                                                                                                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                          PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Novel Polygeptides and Nucleic Acids
                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                     PRIOR
                                                                        PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                           R APPLICATION NUMBER:
R FILING DATE: 19
R APPLICATION NUMBER:
R FILING DATE: 19
                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1999-
                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                 FILING DATE: 1
APPLICATION NUMBER:
                                                                                                       APPLICATION NUMBER:
                                                                                                                  FILING DATE:
APPLICATION NUMBER:
          FILING DATE:
                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggacccagtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaaaaaaaaaaa 1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaaaaaaaaaaa 1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                        Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard, Audrey
Gurney, Austin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/09380138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wood, William
                                                                                                                                                                                                                                                                                                                                      1998-03-10
                                                                                                                                                                                                                                                                                                                                                       MBER: PCT/US99/05028
1999-03-08
                                                                                                                                                                                                                                                                                                                                                                                 1999-08-25
                                                                                                                                                                                                                             1998-03-13
                                                                                                                                        1998-03-20
                                                                                                                                                            1998-03-20
                                                                                                                                                                                                       1998-03-17
                                                                                                                                                                                                                                                                      1998-03-11
                              1998-03-27
                                                   1998-03-27
                                                                        1998-03-
                                                                                                                  1998-03-20
                                                                                                                                                                                                                                                 1998-03-12
                                                                                                                                                                                                                                                                                            1998-03-11
           1998-03
                                                                                              1998-03-
                                                                                                                                                                                 1998-03-20
                                                                                                                                                                                                                                                                                                                  1998-03-11
                                                                                                                                                                                                                                                                                                                                               US 60/077,450
                                                                                                                                                                                                                                                            SD
                                                                                   SD
                                                                                                        SD
                                                                                                                             S
                                                                                                                                                                        Sn
                                                                                                                                                                                                                                       SD
                                                                                                                                                                                                                                                                                US 60/077,649
                                                                                                                                                                                                                                                                                                                           US 60/077,632
us 60/079,689
                                         _{\rm SU}
                                                              S
                                                                                                                                                  us 60/078,939
                                                                                                                                                                                            US 60/078,886
                                                                                                                                                                                                                 US 09/040,220
                                                                                                                                                                                                                                                                                                      US 60/077,641
                                                                        -26
            27
                                                                                                                                                                                                                                                           60/077,791
                    60/079,664
                                       60/079,786
                                                             60/079,728
                                                                                  60/079,656
                                                                                                       60/079,294
                                                                                                                            60/078,936
                                                                                                                                                                      60/078,910
                                                                                                                                                                                                                                       60/078,004
                                                                                                                                                                                                                                                                                                                                                                                                                Encoding the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1680
                                                                                                                                                                                                                                                                                                                                                                                                                Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                            PRIOR
PRIOR
                                                                                                                 PRIOR PRIOR
                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                 PRIOR
                                                                                           PRIOR
                                                                                                                                      PRIOR
                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R FILING DATE:
R APPLICATION I
R FILING DATE:
                                                                                                                                                                               APPLICATION FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                     APPLICATION |
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                       APPLICATION
                                                                                          APPLICATION
                                                                                                       FILING DATE:
                                                                                                                 FILING DATE: APPLICATION
                                                                                                                                      APPLICATION
                                                                                                                                                   FILING DATE:
                                                                                                                                                           FILING DATE: APPLICATION
                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                           APPLICATION
                                                                                                                                                                                                                                      APPLICATION FILING DATE:
                                                                                                                                                                                                                                                           FILING DATE
                                                                                                                                                                                                                                                                      APPLICATION
                                                                                                                                                                                                                                                                                APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                APPLICATION
                                                                                                                                                                                                                                                                                                                           APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                 FILING DATE
                                                                                                                                                                                                                                                                                                                                                             APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION
                                       FILING DATE
                                                            FILING DATE
                                                                                 FILING DATE
                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N NUMBER:
1998-03-27
US f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N NUMBER:
1998-03-31
US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER:
1998-03-
                                                                                                                                                                                                                                                                                                                   NUMBER:
1998-04-15
                                                                                                                                                                                                                              NUMBER:
1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER:
                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER:
         NUMBER
                                                                       NUMBER
                                                                                           NUMBER:
                                                                                                                 NUMBER:
                                                                                                                                      NUMBER:
                                                                                                                                                            NUMBER
                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                       NUMBER:
                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                      NUMBER:
                                                                                                                                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-30
                                                                                                                                                                                                                                                                                                      1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-01
                  1998-04-29
                                                            1998-04-
                                                                                 1998-04-29
                                                                                                      1998-04-29
                                                                                                                           1998-04-28
                                                                                                                                                 1998-04-27
                                                                                                                                                                      1998-04-23
                                                                                                                                                                                            1998-04-23
                                                                                                                                                                                                                 1998-04-22
                                                                                                                                                                                                                                                          1998-04-22
                                                                                                                                                                                                                                                                                1998-04-21
                                                                                                                                                                                                                                                                                                                                                1998-04-15
                                                                                                                                                                                                                                                                                                                                                                       1998-04-
                                                                                                                                                                                                                                                                                                                                                                                           1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-08
                                      1998-04-29
                                                                                                                                                                                                                                                                                        Sn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                 SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SD
                                                                                                                                                                                                                             SD
                                                                                                                                                                                                                                                                        US
                                                                                                                                                                                                                                                                                                                  SU
                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                     US
                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 60/080,165
                                                                                                                 S
                                                                                                                                      S_{0}
                                                                                                                                                            SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US 60/080,328
                                                                                                                                                                                 SD
                                                                                                                                                                                                       SD
                                                             29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/080,333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/080,107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/080,194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/079,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/079,923
                                                                                                                                                                                                                                                                                                                                                                                                                                              60/081,203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/081,070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/081,071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/080,334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/080,327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/080,105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/079,663
                                                60/083,554
                                                                                                                                                                               60/082,796
                                                                                                                                                                                                                          60/082,704
                                                                                                                                                                                                                                                                                            60/082,568
                                                                                                                                                                                                                                                                                                                                      60/081,817
                                                                                                                                                                                                                                                                                                                                                                                60/081,955
                                                                                                                                                                                                                                                                                                                                                                                                                         60/081,229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/081,195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081,049
                             60/083,495
                                                                      60/083,545
                                                                                           60/083,499
                                                                                                                 60/083,392
                                                                                                                                      60/083,322
                                                                                                                                                            60/083,336
                                                                                                                                                                                                      60/082,767
                                                                                                                                                                                                                                                 60/082,804
                                                                                                                                                                                                                                                                     60/082,700
                                                                                                                                                                                                                                                                                                                  60/082,569
                                                                                                                                                                                                                                                                                                                                                            60/081,952
                                                                                                                                                                                                                                                                                                                                                                                                     60/081,838
       60/083,558
```

DB 17;

1679; ۳. Gaps

Indels Length

۳.

65 60

184 180

```
PRIOR FILING DATE: 1
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R APPLICATION NUMBER:
RR FILING DATE:
R APPLICATION NUMBER:
RR FILING DATE:
R APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R APPLICATION NUMBER:
R FILING DATE: 199
R APPLICATION NUMBER:
R FILING DATE: 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
1998-05-05
APPLICATION NUMBER:
US 6
APPLICATION 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1
APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 05 07 NATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 1
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: UFILING DATE: 1998-05-APPLICATION NUMBER: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US (FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 1
                                                                                                                                                                                                                                                                                                                           APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION
FILING DATE:
                                                                                 FILING DATE
                                                                                                           APPLICATION
FILING DATE:
                                                                                                                                     FILING DATE
                                                                                                                                                               FILING DATE:
                                                                                                                                                                                        APPLICATION FILING DATE:
                                                                                                                                                                                                                                APPLICATION
                                                                                                                                                                                                                                                            APPLICATION
                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                    FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                               APPLICATION
                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
              SEQ ID
                            DATE
                                                                                                                                                                                 NUMBER:
1998-05-
                                                                                                                                                                                                        N NUMBER:
1998-05-22
US 6
                                                                                                                                                                                                                                                                                        NUMBER:
1998-05-15
US
                                                                                                                                                                             NUMBER:
                                                                                                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                         NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER:
              1998-09-11
538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TH: US 6
1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-29
                                                                                                                                                                1998-05-22
                                                                                                                                                                                                                                              1998-05-22
                                                                                                                                                                                                                                                                         1998-05-18
                                                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                                                                                                       1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-07
                                                      1998-07
                                                                                1998-05
                                                                                                            1998-05
                                                                                                                                    1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SD
                                                                                                                                                                                                                                                                                                                                                                    SD
                                                                                                                                                                                                                                                                                                                                                                                                                        Sn
                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US 60/084,600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US 60/084,643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US 60/084,637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SD
                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                           SD
                                                                   S
                                                                                                                         SD
                                                                                                                                                                                                                                                            S_{\Omega}
                                                                                                                                                                                                                                                                                     S
                                                      -30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29
                                                                                 -28
                                                                                                                                                                                            -22
                                                                                                                                       -28
                                                                                                                                                                                                                                                                                                                                                                                                            Ĺ
                                                                                                            28
                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                  75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083,500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083,496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/084,639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084,640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084,414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083,559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/085,323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084,627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/084,598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084,441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084,366
                                        60/100,038
                                                                   60/094,651
                                                                                                                       60/087,098
                                                                                                                                                    60/087,208
                                                                                                                                                                             60/086,430
                                                                                                                                                                                                      60/086,392
                                                                                                                                                                                                                                60/086,414
                                                                                                                                                                                                                                                            60/086,485
                                                                                                                                                                                                                                                                                       60/086,023
                                                                                                                                                                                                                                                                                                               60/085,700
                                                                                                                                                                                                                                                                                                                                         60/085,689
                                                                                                                                                                                                                                                                                                                                                                   60/085,582
                                                                                                                                                                                                                                                                                                                                                                                              60/085,704
                                                                                                                                                                                                                                                                                                                                                                                                                       60/085,579
                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085,580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085,697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085,573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085,338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085,339
                                                                                               60/087,106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: HOM
US-09-380-138-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                       δÃ
                                                      밁
                                                                              Q
                                                                                                            B
                                                                                                                                    δÃ
                                                                                                                                                               В
                                                                                                                                                                                        20
                                                                                                                                                                                                                    Вb
                                                                                                                                                                                                                                           Ϋ́
                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                    665
                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                         605
                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                             545
                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                  485
                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                     425
                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125
  905
                            901
                                                                                                            785
                                                                                                                                    781
                                                                                                                                                               725
                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaaaaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaaagaagaagaaaaaagaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                    atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                        attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                            cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
            gatgacaaaagactgattgaaggaaaggagaggtggaaagtggaaaacaggacctttcctc
                                                                  aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                       accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                           ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                      atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                             attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                    aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                         accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                             gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                  ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                              cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                    tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1661.4;
Pred. No. 1.2e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .2e-236;
```

PRIOR

PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

NUMBER OF SEQ ID NO 5

LENGTH:

522 1679

PRIOR FILING

PRIOR PRIOR PRIOR PRIOR

780

904

844 840 784 720 664 660 604

724

544 540 484 480 424 420 364 360 304 300 244 240

600

PRIOR PRIOR PRIOR PRIOR PRIOR

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                  US-09-918-585A-522; Sequence 522; App
                                                                                                                                                                                                                                                                                                                                                                                D
                                                                                                                                                                                                                                                                                                                                                                                                        Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽
                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                      APPLICANT:
 APPLICANT:
                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                  1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1025
                                                                                                                                                                                                                                                                                                                                                          1621
                                                                                                                                                                                                                                                                                                                                                                                   1565
                                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                    1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccaccaccaccaccaccacacagcaatggcaacaccggcagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gaggtgagcaacggcacgtcgaggagggcaggctgctctggctctggctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgcgtcagc
                                                                                                                                                                                                                                                                                                                                              cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggtacaatggagttttcttttcccaaacgggaagaacacagcacaccccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ccaccaccaccaccaccaccaccagcaatggcaaccaccgacagccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                 atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \verb|aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tecaacaagetgggecacaceaatgecageatcatgetatttggtecaggegecgteage
                                                                                                                                                                                                                                                                                                                                                                                  atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                   cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                         Ashkenazi, Avi
                                                                                                                                       Fong,
Gao,
                                                                                                                                                                                                          Baker Kevin P.
Botstein, David
                                                                       Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
                      Kuo,
                                               Gurney, Austin L.
Hillan, Kenneth J
                                                                                                               Gerritsen,
                                                                                                                           Gerber,
                                                                                                                                                              Filvaroff, Ellen
                                                                                                                                                                                         Eaton,
                                                                                                                                                                                                      Desnoyers, Luc
                                   Kljavin,
         Kuo, Sophia S.
Napier, Mary A.
                                                                                                                                                                                                                                                                   Application
 James;
                                                                                                                                         Wei-Qiang
                                                                                                                                                   Sherman
                                                                                                                                                                                          Dan
                                                                                                                          Hanspeter
                                   Ivar J.
                                                                                                              Mary E.
                                                                                                                                                                                                                                                                     US/09918585A
                                                                                                                                                                                                                                                                                                                                   1679
                                                                                                                                                                                                                                                                                                                                                           1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1444
                                                                                                                                                                                                                                                                                                                                                                                                                                       1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1500
                                                                                                                                                                                                                                                                                                                                                                                    1624
                                                                                                                                                                                                                                                                                                                                                                                                            1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: PRIOR APPLICATION NUI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
                                                                                     PRIOR
PRIOR
PRIOR
                                                                                                                          PRIOR
PRIOR
                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/918,585A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: P2630P1C3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                       PRIOR
PRIOR
PRIOR
                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-03-10 APPLICATION NUMBER: 60/077632
                                                                                                                                                                                                                                                       APPLICATION NUMBER: 6
FILING DATE: 1998-03-
APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
FILING DATE:
APPLICATION
                                     APPLICATION NUMBER: FILING DATE: 1998-04
                                                             FILING DATE: 1998-04-01
                                                                         APPLICATION NUMBER:
                                                                                                               FILING DATE: 1998-03-31
                                                                                                                          APPLICATION NUMBER:
                                                                                                                                       APPLICATION NUMBER: 60, FILING DATE: 1998-03-33
                                                                                                                                                                 FILING DATE: 1998-03-
                                                                                                                                                                           FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                             FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                           FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-03-26
APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                       APPLICATION NUMBER: 60/080333
                                                                                      FILING DATE:
                                                                                                 APPLICATION NUMBER: 60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roy, Marga
Shelton, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paoni, Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Margaret
 NUMBER:
                                                                                                                                                                                                                                                                                                                                               1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-03-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1997-11-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-
             1998-04-01
                                                                                                                                                                                                                  1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-1
                                      1998-04-01
                                                                                      1998-03-31
                                                                                                                                                                                          1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Secreted and Transmembrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Timothy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001-07-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/062250
                                                                                                                                                                                                                                                                       60/079728
3-27
                                                                                                                                                                                                                                                                                                                                                                                                                                    60/078939
 60/080334
                                                 60/080328
                                                                          60/080327
                                                                                                                          60/080165
                                                                                                                                                   60/080107
                                                                                                                                                                              60/080105
                                                                                                                                                                                                       60/079923
                                                                                                                                                                                                                               60/079920
                                                                                                                                                                                                                                                         60/079786
                                                                                                                                                                                                                                                                                                         60/079663
                                                                                                                                                                                                                                                                                                                                   60/079689
                                                                                                                                                                                                                                                                                                                                                                                   60/079656
                                                                                                                                                                                                                                                                                                                                                                                                            60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic
```

DATE: 1998-04-01

```
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                   PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OR APPLICATION NUMBER: 60/081203
OR FILLING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081229
OR FILLING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081955
OR FILLING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081817
OR APPLICATION NUMBER: 60/081817
OR FILLING DATE: 1998-04-15
OR FILLING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-04-15
DR FILLING DATE: 1998-04-15
DR FILLING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/08
DR APPLICATION NUMBER: 60/08
DR APPLICATION NUMBER: 60/08
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-04-21
DR FILLING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OR APPLICATION NUMBER: 60/08
RR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 1998-04-08
OR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                DR APPLICATION NUMBER: 60/083322
DR FILING DATE: 1998-04-28
R APPLICATION NUMBER: 60/08392
DR FILING DATE: 1998-04-29
DR APPLICATION NUMBER: 60/083495
DR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                          R FILING DATE: 1998-04

RR APPLICATION NUMBER:

RR FILING DATE: 1998-04

RR APPLICATION NUMBER:

RR APPLICATION NUMBER:

RR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PR FILING DATE: 1998-04-22
RE APPLICATION NUMBER: 60/08
RE FILING DATE: 1998-04-22
RE APPLICATION NUMBER: 60/08
RE FILING DATE: 1998-04-22
RE APPLICATION NUMBER: 60/08
RE FILING DATE: 1998-04-22
                                                                     R APPLICATION N
R TILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R FILING DATE:
R APPLICATION
R FILING DATE:
                                                                                                                                                                                                              R FILING DATE:
R APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082796
FILING DATE: 1998-04-23
APPLICATION NUMBER: 60/083336
FILING DATE: 1998-04-27
DESCRIPTION NUMBER: 60/083333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 1998-0
                           FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 6
FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DATE: 1998-04-08
                                                                                                                                                                                                                                               NUMBER: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER:
                           NUMBER: 60/084639: 1998-05-07
                                                                        NUMBER:
                                                                                                       NUMBER:
                                                                                                                                      NUMBER:
                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                NUMBER: 60/0: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                        NUMBER:
                                                                                                                                                                                                                                                                                                                                         1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-
                                                                                                                                                                                                                                                                             1998-04-29
                                                                                          1998-05-
                                                                                                                                                    1998-05-05
                                                                                                                                                                                   1998-04-30
                                                                                                                                                                                                                                                                                                            1998-04-29
1998-05-07
                                                                                                                         1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/082704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/082569
                60/084640
                                                                          60/084637
                                                                                                         60/084441
                                                                                                                                      60/084414
                                                                                                                                                                    60/084366
                                                                                                                                                                                                 60/083742
                                                                                                                                                                                                                                  60/083500
                                                                                                                                                                                                                                                               60/083559
                                                                                                                                                                                                                                                                                            60/083558
                                                                                                                                                                                                                                                                                                                         60/083554
                                                                                                                                                                                                                                                                                                                                                         60/083545
                                                                                                                                                                                                                                                                                                                                                                                        60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/082797
                                                                                                                         90
                                                                                                                                                                                                                                                                                                                                                                         29
```

```
PRIOR APPLICATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR PELICATION NUMBER: 60/085580
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR FILING DATE: 1998-05-15
Matches
             Query Match
Best Local
                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                            OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60,
OR APPLICATION NUMBER: 60,
OR APPLICATION NUMBER: 60,
OR FILING DATE: 1998-05-15
             Local Similarity
                                                                                                                                                                                                                                                                FILING DATE: 1998-0: APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION N
FILING DATE:
                                                                    APPLICATION NUMBER: 60/085697
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/086023
                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                      APPLICATION
                                                       APPLICATION FILING DATE:
                                                       DATE:
Conservative
                                                                                                                                                                                                                                                                                                                                                                      NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                    NUMBER: 60/085339
1998-05-13
                                                                                                                                                                                                                                                                                                                            1998-05-13
                                                                                                                                                                                                                                                                 1998-05-1
                                                                                                                                                                                                                                                                                                                                                        1998-05-13
                                                         1998-05-18
            98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                             60/085582
                                                                                                                                                                                                                                                                                                                                                                      60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084598
                                                                                                                                                                                                                                                   60/085689
                                                                                                                                                                                                                                                                                 60/085700
                                                                                                                                                                                                                                                                                                                                         60/085323
0;
            Score 1661.4;
Pred. No. 1.2
Mismatches
                             В
                             34;
```

Qy Вþ Qy B QY 밁 QΥ 밁 Qy g Qy g 305 301 245 241 185 361 181 125 121 66 61 6 gtocttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaaaaaagaagaaga atcaggaaagaaagaaagaaaaaaccgaacctgacaaaaaagaagaagaaaaagaaga gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc .2e-236; Indels 1; Gaps 124 120 65 60 420 364 360 300 244 240 184 180 304

Length

1679;

۳.

밁 ΩĀ Дb

365

421

481 425

cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa

tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg

gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag

tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg

484 480 424

cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa

544

Qy

Qγ

밁

Qγ

Ф Ф Ф Ф Ф

В

B

1679

```
1381
                                                                                                                                                                                                                                                                                                                                     1325
                                                                                                                                                                                                                                                                                                                                                                          1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1145
                                                                                                              1505
                                                                                                                                                 1501
                                                                                                                                                                                      1445
                                                                                                                                                                                                                          1441
                                                                                                                                                                                                                                                             1385
                                                                                                                                                                                                                                                                                                                                                                                                             1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1025
                                      1565
                                                                         1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
 1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gatgacaaaagactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                accytgaactatccaccatacatttcagaagccaagggtacaggtytccccytgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gactacgagtgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gaggtgagcaacggcacgtcgaggagggcaggctgctgctctggctgctctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgttggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                     ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                 ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                       aatactttggggggaaaaaagttttaaaaaagagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                              ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            accytyaactatccaccatacatttcayaayccaayyytacayytytccccytyyyacaa
                                                                                                                            cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                     aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                           ccaccaccaccaccaccaccaccagcaatggcaaccaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtc
atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                        atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcggggcactttggtag
                                                                                                          cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                    ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
 1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                                             1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604
                                                                                                                                                                                                                                                                                                                                                                          1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                               1444
                                                                                                                                                                                                                                                                                                  1440
                                                                                                                                                                                                                                                                                                                                       1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                      1624
                                                                           1620
                                                                                                                1564
                                                                                                                                                   1560
                                                                                                                                                                                        1504
                                                                                                                                                                                                                            1500
```

Db Qy

40 40 40 40

40 40 P

APPLICATION

NUMBER:

60/079656

О р О р О р О р О р О р

Db

```
US-09-978-188A-522
                                                                                                                                                                                                                              APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembran
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C8
CURRENT APPLICATION NUMBER: US/09/978,188A
CURRENT FILING DATE: 2001-07-30
PRIOR FILING DATE: 2001-07-30
PRIOR PRICING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/076434
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1997-11-27
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 522, Applic GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
PRIOR
                                               PRIOR
PRIOR
PRIOR
                                                                                                                   PRIOR
PRIOR
FILING DATE:
                      APPLICATION NUMBER:
                                               APPLICATION NUMBER: 60/078939 FILING DATE: 1998-03-20
                                                                                               FILING DATE: 1998-03-20
                                                                                                                   FILING DATE: APPLICATION N
                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T: Wood, William I.
INVENTION: Secreted and Transmembrane Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hillan, Kenneth J
Kljavin, Ivar J.
Kuo, Sophia S.
Napier Mari
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Botstein, David
Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shelton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wei-Qiang
                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nicholas F
                                                                                                                                              1998-03-20
  1998-03-25
                                                                                                                                                                                           1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        David L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ש
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/09978188A
                         60/079294
                                                                                                                     60/078910
                                                                                                                                                                     60/078936
                                                                                                                                                                                                                  60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and
```

FILING

1998-03-26

PRIOR DR APPLICATION NUMBER: 60/01
DR FILING DATE: 1998-04-21
DR APPLICATION NUMBER: 60/01
DR FILING DATE: 1998-04-22
DR FILING DATE: 1998-04-22
DR FILING DATE: 1998-04-22
DR APPLICATION NUMBER: 60/01
DR APPLICATION NUMBER: 60/01 OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/06
OR APPLICATION NUMBER: 60/06
OR APPLICATION NUMBER: 60/06
OR APPLICATION NUMBER: 60/06
OR FILING DATE: 1998-04-15 DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-08
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-08 OR APPLICATION NUMBER: 60/082796
R FILING DATE: 1998-04-23
R FILING DATE: 1998-04-27
OR APPLICATION NUMBER: 60/083336
OR APPLICATION NUMBER: 60/083322
OR FILING DATE: 1998-04-28
OR FILING DATE: 1998-04-28 R APPLICATION NUMBER: 6 R FILING DATE: 1998-04-R APPLICATION NUMBER: 6 R FILING DATE: 1998-04 APPLICATION NUMBER: 60/091203 FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/081229 FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/081955 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080333 APPLICATION NUMBER: 60/080327
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080328
FILING DATE: 1998-04-01 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080194 APPLICATION NUMBER: 60/080107 APPLICATION NUMBER: 60/080105 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079786 APPLICATION NUMBER: 60/079728 APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-27 APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081195 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081071 FILING DATE: APPLICATION NUMBER: 60/080165 FILING DATE: FILING APPLICATION NUMBER: 60/079920 FILING FILING APPLICATION NUMBER: 60/079663 APPLICATION NUMBER: FILING DATE: 1998-0. APPLICATION FILING DATE: FILING DATE: DATE: DATE: NUMBER: 60/083392 1998-03-1998-03-27 1998-03-31 1998-03-30 1998-03-31 1998-04-22 1998-04-1998-04-1998-04-21 1998-04-15 60/081952)4-15 60/080334 60/082704 60/082569 60/081838 60/081819 60/081817 60/081049 60/081070 60/082700 60/082797 60/082804 60/082568

```
PRIOR FILING PRIOR FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                   PRIOR APPLICATION NUMBER: 60/1971 PRIOR FILING DATE: 1998-05-15
                                                                            PRIOR APPLICATION NUMBER: 60
PRIOR FILING DATE: 1998-05-1
PRIOR APPLICATION NUMBER: 60
PRIOR FILING DATE: 1998-05-1
                                                                                                                                  PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085689
PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                               PRIOR FILING DATE:
                                                                                                                                                                                                                                        PRIOR APPLICATION 1
PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/C
TTYING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-30
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-01 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: APPLICATION 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-
                        APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15
                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION
APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                              APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                       NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER: 60/084640: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER: 60/
: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-06
                                                                                                                                                                                                                 1998-05-13
                                                                                                                                                                                                                                                                                             1998-05-07
                                                                                                                                                                                                                                                                                                                       1998-05-07
                                                                                                                                                                                                                                                                                                                                                1998-05-07
                                                                                                                                                                                                                                                                                                                                                                         1998-05-07
                                                                                                                                                                                      1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                          60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/083554
                                                                                                                                                                                                   60/085582
                                                                                                                                                                                                                                                                                                         60/084643
                                                                                                                                                                                                                                                                                                                                                              60/084600
                                                                                                                                                                                                                                                                                                                                                                                        60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083495
                                                                  60/085573
                                                                                           60/085580
                                                                                                                                                                                                                             60/085323
                                                                                                                                                                                                                                                      60/085338
                                                                                                                                                                                                                                                                                 60/085339
                                                                                                                     60/085579
                                                                                                                                                                          60/085700
```

δÃ 밁 QY B Matches Query Match Best Local 99 61 Local Similarity σ atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct Conservative 98.1%; 99.9%; Score 1661.4; Pred. No. 1.2e 0; Mismatches 0; .2e-236; DB 36; Indels Length 1679; 1: Gaps 124 120 65 60

۲

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                       Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                 Qy
                                                                                                       ρ
                                                                                                                                                               Qy
                                                                                                                                                                                              망
                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                             밁
δã
                           밁
                                                                                 Дb
                                                                                                                                       밁
                             1145
                                                                                   1085
                                                                                                                                         1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          545
                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
  1201
                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125
                                                                                                                                                                                                965
                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                       905
                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                              845
                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                   785
                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                       725
                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acggggctggctgtctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                            tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                     gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                             aaggggacactgcagtgtgaagoctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                   accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                   accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                       gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                       ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                               gaggtgagcaacggcacgtcgaggagggcaggctgctgctctggctgctctcttctggtc
                                                                                                                                                                                                                                                       gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                             aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
  ccaccaccaccaccaccaccaccagcaatggcaacccgacagcaaccaatcagatatata
                                             ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                       tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                               tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                             ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184
                              1204
                                                         1200
                                                                                    1144
                                                                                                                                          1084
                                                                                                                                                                     1080
                                                                                                                                                                                                  1024
                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                        964
                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                904
                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                    844
                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                          784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
```

Ωy Дb δõ Qγ Вþ 80 밁 Š

```
Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
US-09-978-189-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
APPLICANT: Stewart, Timothy A.
APPLICANT: Wrans, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C7
CURRENT APPLICATION NUMBER: US/09/978,189
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/064249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
GENERAL I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1561
                                                                                                 CANT: Tumas, Daniel
CANT: Williams, P. Mickey
CANT: Wood, William I.
OF INVENTION: Secreted and Transmembrane
OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ccaccaccaccaacacaacagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           actytyccaccacygcytytyttytyaaacytyaaataaaaagaycaaaaaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gurney, Aus...
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ashkenazi,
                                                                                                                                                                                                                                                                                                                                                                              Gao,
                                                                                                                                                                                                                                                                                              Grimaldi, J. Christopher Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                       Gerritsen, Mary
Goddard, Audrey
                                                                                                                                                                                                                                                         Kuo,
                                                                                                                                                                                                                                                                                                                         Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                         Fong,
                                                                                                                                                                                                                                                                                                                                                                                                      Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Baker Kevin
                                                                                                                                                                                     Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                      Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09978189
                                                                                                                                                                                                                  Paoni,
                                                                                                                                                                                                                                             Napier,
                                                                                                                                                                                                                                James;
                                                                                                                                                                                                                                                                                                                                                                              Wei-Qiang
                                                                                                                                                                                                                                                        Sophia S
                                                                                                                                                                                                                                                                                                                                                                                           Sherman
                                                                                                                                                                                                                  Nicholas
                                                                                                                                                                                                                                                                                                                                                                 Hanspeter
                                                                                                                                                                                                                                        Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                      . Napoleon
ff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P
                                                                                                                                                                                                                                                                                                                            ۲.
                                                                                                                                                                                                                  123
                                                                                                                        Polypeptides
                                                                                                                        and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1564
```

PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-03 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0:
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0: PRIOR FILING DATE: OR FILING DATE: 1998-03-27
DR APPLICATION NUMBER: 60/079689
DR FILING DATE: 1998-03-27
DR APPLICATION NUMBER: 60/079663
DR FILING DATE: 1998-03-27
DR APPLICATION NUMBER: 60/079728
DR FILING DATE: 1998-03-27
DR APPLICATION NUMBER: 60/079786
DR APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/077641 APPLICATION NUMBER: 60/066364 FILING DATE: 1997-11-21 APPLICATION NUMBER: 60/078939 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/079294 APPLICATION NUMBER: 60/077791 FILING DATE: APPLICATION NUMBER: FILING DATE: FILING DATE: APPLICATION NUMBER: APPLICATION NUMBER: 60/077450 APPLICATION NUMBER: 60/065311 FILING DATE: 1997-11-13 APPLICATION NUMBER: 60/081071 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081195 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080328 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080165 APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30 FILING DATE: 1998-03-26 APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-25 APPLICATION NUMBER: 60/079656 FILING APPLICATION NUMBER: 60/081049 FILING DATE: 1998-04-08 FILING DATE: 1998-04 APPLICATION NUMBER: FILING DATE: 1998-03-31 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080105 FILING DATE: 1998-03-30 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079920 FILING DATE: 1998-04-08 APPLICATION NUMBER: FILING DATE: APPLICATION NUMBER: 60/080333 APPLICATION NUMBER: 60/081955 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081229 FILING DATE: 1998-04-09 FILING DATE: APPLICATION NUMBER: 60/081203 DATE: 1997-11-03 1998-04-01 1998-03-1998-03-1998-03-12 1998-03-1998-03-17 1998-03-1998-03-1998-04-09 1998-04-01 60/078936 60/078886 60/078004 60/077649 60/077632 60/081070 60/080334

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR

PRIOR

PRIOR FILLING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083499
PRIOR FILLING DATE: 1998-04-29
PRIOR ETILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083545
PRIOR APPLICATION NUMBER: 60/083554
PRIOR FILLING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083559
PRIOR APPLICATION NUMBER: 60/083559
PRIOR APPLICATION NUMBER: 60/083559
PRIOR APPLICATION NUMBER: 60/08359
PRIOR APPLICATION NUMBER: 60/083500
PRIOR FILLING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083500
PRIOR FILLING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083742
PRIOR APPLICATION NUMBER: 60/084366
PRIOR APPLICATION NUMBER: 60/084366
PRIOR APPLICATION NUMBER: 60/084414
PRIOR APPLICATION NUMBER: 60/084414
PRIOR APPLICATION NUMBER: 60/084414
PRIOR APPLICATION NUMBER: 60/084414
PRIOR APPLICATION NUMBER: 60/084414 PRIOR APPLICATION NUMBER: 60/082569 PRIOR FILING DATE: 1998-04-21 PRIOR PRIOR APPLICATION NUMBER: 60/083392
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083495
PRIOR FILING DATE: 1998-04-29 PRIOR APPLICATION NUMBER: 60/082796 PRIOR FILING DATE: 1998-04-23 PRIOR APPLICATION NUMBER: 60/083336 PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082797
PRIOR FILING DATE: 1998-04-22 PRIOR APPLICATION NUMBER: 60/082804 PRIOR FILING DATE: 1998-04-22 PRIOR FILING DATE: PRIOR APPLICATION NUMBER: 60/082704 PRIOR FILING DATE: PRIOR APPLICATION NUMBER: 60/084441 PRIOR FILING DATE: 1998-05-06 PRIOR APPLICATION NUMBER: 60/084637 PRIOR EPPLICATION NUMBER: 60/083496
PRIOR FILING DATE: 1998-04-29 PRIOR APPLICATION NUMBER: 60/082700 OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084637
OR APPLICATION NUMBER: 60/084639
OR APPLICATION NUMBER: 60/084639
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084640
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084598
OR FILING DATE: 1998-05-07
OR FILING DATE: 1998-05-07 DR APPLICATION NUMBER: 60/084600
DR FILING DATE: 1998-5-07
DR APPLICATION NUMBER: 60/084627
DR FILING DATE: 1998-05-07
DR APPLICATION NUMBER: 60/084643
DR FILING DATE: 1998-05-07
DR APPLICATION NUMBER: 60/085339 APPLICATION NUMBER: APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15 FILING DATE: 1998-04-APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-APPLICATION NUMBER: 60/081817 FILING DATE: 1998-04-15 FILING DATE: 1998-04-27 APPLICATION NUMBER: 60/083322 FILING DATE: 1998-04-28 APPLICATION NUMBER: 61 FILING DATE: 1998-05-APPLICATION NUMBER: 61 FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-05-13 1998-04-22 1998-04-27 1998-04-1998-05-13 60/082568 60/081819 60/085582 60/085323 60/085338

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               β
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
δõ
                              В
                                                        Ωy
                                                                                          В
                                                                                                                   δÃ
                                                                                                                                                     В
                                                                                                                                                                             Qy
                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085700
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085689
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085579
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085580
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085573
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085573
OR FILING DATE: 1998-05-15
                                                                                           665
                                                                                                                                                     605
                                                                                                                                                                                    601
                                                                                                                                                                                                                    545
                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                               485
                                                                                                                                                                                                                                                                                                                                             425
                                                                                                                                                                                                                                                                                                                                                                                                       365
                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                              725
                                                             721
                                                                                                                          661
                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R APPLICATION NUMBER: (R FILING DATE: 1998-05: R APPLICATION NUMBER: (R APPLICATION NUMBER: 1998-05: R FILING DATE: 1998-05: R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atcaggaaagaaagaaagaaaaaaaaaccgaacctgacaaaaaagaagaagaaaâagaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acggggctggctctgtgtctctttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1673;
                                                                                                                                                                                                                                  attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                             tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                       gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga
 accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                gactacgagtgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtc
                                                                                                             ggctttgtgagtgaagacgaatacttggaaaattcagggcatcacccggggagcagtcaggg
                                                                                                                                                     atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                     atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                    attgtagagatttcttcagatatctccattaatgaagggaacaatattagc~tcacctgc
                                                                                                                                                                                                                                                                                                              cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                     {\tt gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                              gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                          ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                              cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtaictcccaaa
                                                                                                                                                                                                                                                                                                                                         tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 1.2e-236;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1661.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                              484
                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65
   840
                                784
                                                             780
                                                                                           724
                                                                                                                          720
                                                                                                                                                        664
                                                                                                                                                                                         660
                                                                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                 544
                                                                                                                                                                                                                                                                                                                                                                                                          424
                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
```

```
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                       Qy
                                                      В
                                                                           NO.
                                                                                                       В
                                                                                                                             γ
                                                                                                                                                       뫄
                                                                                                                                                                              Qy
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                     Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D
                                                                                                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1025
                                                                                                                                                                                                           1385
                                                                                                                                                                                                                                                             1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                             1621
                                                                                                                                                         1445
                                                                                                                                                                                                                                   1381
   1625
                                                      1565
                                                                                                                               1501
                                                                                                                                                                                  1441
                                                                                                                                                                                                                                                                                                             1265
                                                                              1561
                                                                                                       1505
                                                                                                                                                                                                                                                                                      1321
                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                               1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattcccagtggtacaag
gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tccaacagctgggccacaccaatgccagcatcatgctatttggtccaggggcgctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagaacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                               atagagacgaacagaatgagaccttccggcccaagcgttggcgctgcgggcactttggtag
                                                                                                                 cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                   ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                      ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                       aatactttggggggaaaaagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                         ccaccaccaccaccaccaccaccagcaatggcaaccaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                          ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                               gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tccaacaagctgggccaccaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                          \mathtt{aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta}
                                                                                                                                                                                                                                                                                                              ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                     atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                     cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                       ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                              1675
                                                                                                                                                                                                                                   1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                               1384
                                                                                                                                                                                                                                                                                                                 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844
                                                                                                                                                                                                                                                                                         1380
                                                                                                                                                                                                                                                                                                                                          1320
                                                                                                                                                                                                                                                                                                                                                                   1264
                                                                                                                                                                                                                                                                                                                                                                                           1260
                                                                                                                                                                                                                                                                                                                                                                                                                   1204
                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                          1624
                                                                                                                                                           1504
                                                                                                                                                                                     1500
                                                                                                                                                                                                             1444
                                                                                 1620
                                                                                                          1564
                                                                                                                                   1560
```

```
RESULT 6
US-09-978-191A-522
                                                                                                    Sequence 522, Applic GENERAL INFORMATION:
APPLICANT:
APPLICANT:
APPLICANT:
                                APPLICANT:
                                                                              APPLICANT:
                                                       APPLICANT:
                                                                   APPLICANT:
                                                                                          Ashkenazi,
                      Ferrara, Na Filvaroff,
 Gao,
         Fong,
                                                     Desnoyers, Luc
                                                                              kshkenazi, Avi
Baker Kevin P.
                                             Eaton, Dan
                                                                   Botstein, David
                                                                                                                Application US/09978191A
Wei-Qiang
          Sherman
                                Napoleon
                      Ellen
```

```
APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/978,191A
CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/062250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/065311 FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/077649 FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-03 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/066364
FILING DATE:
                                                                                          FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079920
                                                                                                                                  APPLICATION NUMBER: 60/079786
                                                                                                                                                  APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27
                                                                                                                                                                                          FILING DATE: 1998-03-27
                                                                                                                                                                                                        FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079689
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079663
                                                                                                                                                                                                                                                                                      FILING DATE: 1998-03-26
APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 6 FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/077791 FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                    APPLICATION NUMBER: 60/080105
                                                        APPLICATION NUMBER: 60/079923
                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski,
Grimaldi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, r. max
wood, William I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gurney, Austin L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Daniel
ms, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nicholas
    1998-03-31
                                                                          1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1997-10-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-
                                      1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/077450
                                                                                                                                                                                                                                                                                                                                                                  60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic
                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILING DATE: 1998 04-23
PRIOR APPLICATION NUMBER: 60/083336
PRIOR FILING DATE: 1998-04-27
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/083392
                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                      PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083558
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083559
                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-04
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/081070 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/082568 FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60 FILING DATE: 1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/080328 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/080107
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-01
                                                                                                                                                  APPLICATION NUMBER: 60/083545
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                            APPLICATION NUMBER: 60/083499 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083495
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                  APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                  FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/082797
FILING DATE: 1998-04-22
                                                        FILING DATE:
```

1998-04-

60/082804 60/082704 60/082569

60/081838 60/081952 1998-04-1998-04-15 1998-04-09

60/081955 60/081229 60/081203 60/081195 60/081071 1998-04-01

60/080334

60/080327

NUMBER: 60/083742

NUMBER: 60/083559 1998-04-29

```
QΥ
                                                                                                                                                                                                              Dр
                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                       ДЪ
                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
δÃ
                                           В
                                                                             γ
                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084639
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/084600 PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/084441 PRIOR FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-05-06
                                                             301 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct 360
                                                                                                                                                 241 ttccccaaagctatggacaacgtgacggtccggccaggggggagagcgccaccctcaggtgc 300
                                                                                                                                                                                                                                     181 acggggctggctgctctgtgtctctttccaaggagtgcccgtgcgcagcggagatgccacc 240
361 gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag 420
                                      305 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcetctatgct 364
                                                                                                                          185 acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc 244
                                                                                                                                                                                                                                                                                                125 aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc 184
                                                                                                                                                                                                                                                                                                                         121 aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc 180
                                                                                                                                                                                                                                                                                                                                                                                       66 atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 124
                                                                                                                                                                                                                                                                                                                                                                                                                                  61 atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/085323 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60 FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1661.4; DB 36; Length 1679; Pred. No. 1.2e-236;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Gaps
```

1.

1500	4	Qy 1
1444	385 ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggacc	ਰ
1440	gtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccc	Qy :
1380 1384	ww	•
· iu		Db 1
	261 caaatgaaattagaagaaacagagcetcatgggacagaaatttgagggggggggg	•
1260	1201 ccaccaccaccaccaccaccaccaccaccaccaccacca	g Qq
1204	45 ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggc	•
1200		Qy 1
1144	tettetggt	Db 1
1140	aggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgcctgc	Qy 1
1084	1025 tcc.acaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc	Ū
1080	ccaacaagctgggccacaccaatgccagcatcattgctatttggtccaggcgccgtcag	Qy 1
1024	965 tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc	рb
1020	61 tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggc	Qy
964		Дb
960	01 gatgacaaaagactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcc	Qy
904	845 aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag	Db
900	41 aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaa	Qy
844	85 accgtgaactatccaccatacatt	Db
840	81 accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggaca	Qy
		Db
780	21 gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggt	Qy
724	665 ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg	Db
720	61 ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagg	Qy
664	605 atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt	Db
660	01 atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggt	Qy
604	545 attgtagagatttottoagatatotooattaatgaagggaacaatattagcotoacotgo	Db
600	41 attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctg	Qy
544	85 cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa	Db
540	.81 cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa	Qy
484		Db
480	1 tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg	Qγ
424		Db

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-978-192-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
GENERAL I
                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                          FILE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION UNMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 09/918585
                                                                                                                                                                                                                                                                                                                                                                         CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                            PRIOR FILLING LAGGE: 60/
PRIOR APPLICATION NUMBER: 60/
PRIOR PRICING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT
                                             PRIOR FILING DATE: 1998-03
PRIOR APPLICATION NUMBER:
                                                                                               PRIOR FILING DATE:
                                                                                                                                              PRIOR
                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                               PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1445
                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE:
                                                                                                           FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077641
                                                                                                                                             FILING DATE: 1998-03-10 APPLICATION NUMBER: 60/077632
                                                                                                                                                                           FILING DATE: 1997-11-21
APPLICATION NUMBER: 60/077450
                                                                                                                                                                                                           APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                            APPLICATION NUMBER: 60/065311 FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 1560
APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           e 522, Application US/09978192 INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcggggcactttggtag 1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/978,192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gurney, Austin L
Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E. Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ferrara, Napoleon Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                          P2630P1C9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sherman
                NUMBER: 60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nicholas
                                                                                                                                                                                                                                                                                                                           2001-07-30
                                                                                               1998-03-11
   1998-03-13
                               1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ivar J.
                                                                                                                                                                                                                                                                                                                                                          2001-10-15
                                                  60/077791
                                                                                60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C
                                                                                                                                                                                                                                                                                                                                                                                                                           and Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/
PRIOR PILING DATE: 1998-03-30
PRIOR FILING DATE: 1998-03-30
PRIOR FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                              PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0
PRIOR APPLICATION NUMBER:
                                                                                                                               PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082568
                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/081838
                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                  PRIOR FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OR APPLICATION NUMBER: 60/01
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/01
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/079294 FILING DATE: 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/078936
                                                                                                                                                                                               FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                             APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                APPLICATION NUMBER: 60/082804
FILING DATE: 1998-04-22
                                                  FILING DATE:
                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/081203
     NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-26
                                                                                                                                                                                                                                                                                                                                              1998-04-09
                                                  1998-04-22
                                                                                  1998-04-2
                                                                                                                                                                                  1998-04-15
                                                                                                                                                                                                                                                1998-04-
                                                                                                                                                                                                                                                                              1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-08
                                                                                                                                                                                                                1998-04-
                                                                                                                                                                                                                                                                                                              1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/079664
3-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/080107
                                                                                                                                                                                                 60/081952
                                                                                                                                                                                                                                                                 60/081817
                                                                                                                                                                                                                                                                                               60/081955
                                                                                                                                                                                                                                                                                                                             60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                             60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/079728
                                                                                                   60/082569
                                                                 60/082704
```

```
Query Match
                                                                                                                                                                                                                                                              PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                   PRIOR APPLICATION NUMBER: 60/08573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
                                                                                                                                      PRIOR APPLICATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION UNMBER: 60/085580
PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/083496
PRIOR ETILING DATE: 1998-04-29
PRIOR APPLICATION UNMBER: 60/083499
PRIOR FILING DATE: 1998-04-29
                                  PRIOR FILING DATE: PRIOR APPLICATION PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OR APPLICATION NUMBER: 60/084441
OR FILING DATE: 1998-05-06
OR FILING DATE: 1998-05-07
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084639
OR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-25

APPLICATION NUMBER: 60/083495

TITTING DATE: 1998-04-29
                                                                                                                                                                                                         APPLICATION NUMBER: 60/085700
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085689
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/083336 FILING DATE: 1998-04-27 APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/085323
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085338 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/084600 FILING DATE: 1998-5-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/084598
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/084366 FILING DATE: 1998-05-05 APPLICATION NUMBER: 60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083742
FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/083545
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082797
                                                                                                                                                                                                                                                                              FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-05-06
                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-07
                                    1998-05-15
                                                                    1998-05-15
   98.1%;
                                                                                                                                                                                                                                                                                                60/085582
                                                                                                                                                                                                                                                                                                                                                                                                    60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084640
                                                    60/085697
   Score 1661.4;
   DB
   36;
Length 1679;
```

Matches 1673; Conservative 0; Mismatches 1; Indels 1; Gaps ### Conservative 0; Mismatches 1; Indels 1; In																		
accast janilarity 99.99, pred. No. 1.2e-216; 1673; Conservative 0; Mismatches 1; Indels 1; dapp gtocttcagcanaacagtgyatttaaatctccttgocacagottgagagacacaatct 6; alcaggaangaangaangaangaangaacagacagacaacaatct 6; alcaggaangaangaangaangaangaacagacagacagaca	Qy 96 Db 96	v v	8 8	7	7	o o	9 4	UI UI	4 8	42	ωω	30 30	24	18	12	a a		tc
	tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc 1	gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc 9	aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaaattccagtggtacaag 9	accytgaactatocaccatacatttcagaayccaaygytacayytytccccytyggacaa 84	gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc 78	ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg 72	atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt 66	attgtagagatttetteagatateteeattaatgaagggaacaatattageeteaeetge 60 	cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa 54	tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg 48	gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag 4	actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct 36	ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc 30	. acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc 24	aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc 18 	atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 12 	gtocttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 6	cal Similarity 99.9%; Pred. No. 1.2e-236; 1673; Conservative 0; Mismatches 1; Indels 1; Gap

```
US-09-978-192A-522
; Sequence 522, Application US/09978192A
; GENERAL INFORMATION
; APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                    APPLICANT:
                                                               APPLICANT:
                        APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                   APPLICANT:
                                                                                          APPLICANT:
                                                                                                        APPLICANT
                                                                                                                     APPLICANT:
                                                                                                                                  APPLICANT:
                                                                                                                                                APPLICANT:
            APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1025
                                                                                                                                                                                                                                                                                                                                                                                                                                       1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1085 gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1381
                                                                                                                                                                                                                                                                                                                                                                                                \infty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                     atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgcaagctgcatcgtgcaacctctttggtgccagtgtggggcaaggggctcagcctctctg 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aatactttggggggaaaaaagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccaccaccaccaccaccaccaccagcaatggcaaccaccgaccagcaaccaatcagatatata 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                               atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccaccaccaccaacacaacagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                           Fong,
                     Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                               Paoni,
                                                                                                     Kuo,
                                                                                                                                                                                                                               Gao,
                                                                                                                                                                                                                                                         Ferrara, Napoleon Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                Botstein, David
Desnoyers, Luc
                                                                                                                    Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                            Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                    Gerritsen,
                                                                                                                                                                                                                  Gerber, Hanspeter
Williams, P. Mickey
                                                                                          Napier,
                                                                                                                                              Gurney, Austin L.
                                                                                                                                                                                         Goddard, Audrey
                                                                                                                                                                                                                                                                                                                             Baker Kevin
                                                                                                                                                                                                                               Wei-Qiang
                                                                              James;
                                                                                                       Sophia S.
                                                                                                                                                                                                                                               Sherman
                                                                Nicholas F.
                                                                                                                                                                                                                                                                                      Dan
            Daniel
                                                                                          Mary A.
                                                                                                                                                                                                    Mary
                                                                                                                                                                                                                                                                                                                              שי
                                                                                                                                                                                                    N
                                                                                                                                                                                                                                                                                                                                                                                                                                        1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1564
```

```
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/06250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
                 PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/978,192A CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-03-27
PRIOR PELICATION NUMBER: 60/079689
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0:
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: P2630P1C9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                           OR FILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/079786
OR FILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/079920
OR FILING DATE: 1998-03-30
OR APPLICATION NUMBER: 60/079923
OR FILING DATE: 1998-03-30
OR APPLICATION NUMBER: 60/080105
OR APPLICATION NUMBER: 60/080105
OR FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OR APPLICATION NUMBER: 60/077649
OR FILING DATE: 1998-03-11
OR FILING DATE: 1998-03-12
OR FILING DATE: 1998-03-12
OR APPLICATION NUMBER: 60/078004
OR FILING DATE: 1998-03-13
OR APPLICATION NUMBER: 60/078886
OR FILING DATE: 1998-03-20
OR APPLICATION NUMBER: 60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DR APPLICATION NUMBER: 60/066364
DR FILING DATE: 1997-11-21
DR FILING DATE: 1997-7450
DR FILING DATE: 1998-03-10
DR APPLICATION NUMBER: 60/077632
DR FILING DATE: 1998-03-11
                               OR FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080333
R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080334
OR FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/081070
R APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/077641 FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-03-20
                                                                                                                                            FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080327
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080328
                                                                                                                                                                                                                     FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080194
                                                                                                                                                                                                                                                          FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                 FILING DATE:
                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/080107
NUMBER: 60/081049
                                                                                                                                                                                                                                                                                1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-20
                   1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/079728
3-27
                                                                                                                                                                                                                                                            60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/079656
```

```
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-
PRIOR APPLICATION NUMBER: 6
                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/083496
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                          PRIOR PRIOR
                                                                                                         PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                        PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                      PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                               PRIOR
                                                             PRIOR
                                                                                                                                                        PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/083392 PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
R APPLICATION NUMBER: 6
R FILING DATE: 1998-05-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/082797
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/
FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/082568 FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/081955 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-08
                                                                          APPLICATION NUMBER:
                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                           FILING DATE:
                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/084366
                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                         APPLICATION NUMBER:
                       1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-29
                                                             1998-05-07
                                                                                                                                                           1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-27
 1998-05-07
                                                                                                                                                                                                                      1998-05-05
                                                                                                                                                                                                                                                      1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-23
                                                                                            1998-05-07
                                                                                                                          1998-05-07
                                                                                                                                                                                                                                                                                    1998-04-29
                                                                                                                                                                                                                                                                                                                 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-29
                                                                                                                                                                                         1998-05-06
                60/084600
                                                                                                                                                                        60/084441
                                                                                                                                                                                                                                                                                                                                60/083559
                                                                                                                                                                                                                                                                                                                                                                60/083558
                                                                                                                                                                                                                                                                                                                                                                                             60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/082569
                                                                                                           60/084639
                                                                                                                                       60/084637
                                                                                                                                                                                                                                                                   60/083742
                                                                                                                                                                                                                                                                                                 60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                             60/083545
                                                                            60/084640
                                                                                                                                                                                                        60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /081195
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                     DЬ
                                                                                      QΥ
                                                                                                                         밁
                                                                                                                                                        20
                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                VQ
                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                 뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-05-1
601 atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                     545
                                                                                      541
                                                                                                                         485
                                                                                                                                                          481
                                                                                                                                                                                             425
                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                 365
                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                     305
                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                         245
                                                                                                                                                                                                                                                                                                                                                                                                                           241 ttccccaaayctatggacaacgtgacggtccggccagggggggagagcgccaccctcaggtgc 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaagaagaagaagaagaagaaga 120
                                                                                                                                                                                                                                                                                 gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                     actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc 180
                                                   attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                     attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                     cagacagacaaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                        cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                         tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                             tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                             gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                       ttocccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER: 60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1661.4; DB 36; Length 1679; Pred. No. 1.2e-236;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Gaps
```

65

1:

660 604 480

424 420

484

544

360

364

240 184

	aga 	1621	dd Yo
1620 1624	gcgtggcgctgcgggcactttggtag	1561 1565	da Að
1560 1564	ccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 	1501 1505	Ωy
	ggtgccagtgtgggcaagggctcagcctctctg 	4 4	Qy Db
1440 1444		ο ο	Qy Db
1380 1384	gaaaaaagttttaaaaaagaaattgaaaattgocttgcagatattta 	1321 1325	Qy Db
1320 1324	pageeteatgggacagaaatttgagggaggggaacaaag	1261 1265	d Qy
1260 1264	ccaccaccaccaccaccacacagcattggcaacaccgacagcaacccaatcagatatata	1201 1205	Qy Db
1200 120 4	aaggctgccg aaggctgccg	1141 1145	dd Qy
1140 1144	gaggtgagcaacggcacgtcgaggagggcaggctgcgtgctggctg	1081	da Qy
1080 1084	aatgccagcatcatg aatgccagcatcatg	1021 1025	Qy Db
1020	atcttcttcaatgtctctgaacatgactatgggaac 	961 965	Db Qy
960 964	aagactgattgaaggaaagaaaggggtgaaagtggaaacagac 	901 905	B 5
900	tgcagtgtgaagcctcagcagtcccctcagcagaattccagtggt 	841 845	g V
340 344	tatocaccatacatttcagaagccaagggtacaggtgtcccc 		д УС
780 784	cggagag cggagag	721 725	B 54
720 724	ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg 7	661 665	P 42
564	$\verb atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt 6 $	605	ф

RESULT 9 US-09-978-193A-522

PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR PELICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077649
PRIOR PRILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077791
PRIOR PILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078004
PRIOR FILING DATE: 1998-03-13 Sequence 522, Application US/09978193A GENERAL INFORMATION: APPLICANT: APPLICANT: Ashkenazi, Avi APPLICANT: Baker Kevin P. APPLICANT: Botstein, David APPLICANT: Desnoyers, Luc TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same EILER REFERENCE: P56300106 CURRENT APPLICATION NUMBER: US/09/978,193A CURRENT FILING DATE: 2002-02-21 PRIOR APPLICATION UNUMBER: 09/91858 PRIOR APPLICATION UNUMBER: 09/91858 PRIOR FILING DATE: 2001-07-30 PRIOR APPLICATION NUMBER: 60/062250 PRIOR APPLICATION NUMBER: 60/064249 PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-11-03 APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079656
PRIOR FILING DATE: 1998-03-26 PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION UNMBER: 60/078939
PRIOR FILING DATE: 1998-03-20 PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21 APPLICANT: PRIOR APPLICATION NUMBER: 60/079689 PRIOR FILING DATE: 1998-03-27 PRIOR APPLICATION NUMBER: 60/079664
PRIOR FILING DATE: 1998-03-27 PRIOR FILING DATE: PRIOR PRIOR APPLICATION N PRIOR APPLICATION NUMBER: 60/077450 PRIOR FILING DATE: 1998-03-10 APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20 APPLICATION APPLICATION NUMBER: Gao, Roy, Margaret Ann Shelton, David L. Stewart, Timothy A. Hillan, Kenneth J Kljavin, Ivar J. Kuo, Sophia S. Ferrara, Napoleon Filvaroff, Ellen Williams, P. Mickey Wood, William I. Tumas, Daniel Paoni, Nicholas F Napier, Mary A. Gurney, Austin L. Godowski, Paul J. Grimaldi, J. Christopher Goddard, Gerritsen, Mary E. Gerber, Pan, James; Wei-Qiang NUMBER: 60/079663 Sherman 1998-03-20 Hanspeter Audrey 60/078936

```
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                 PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
PRIOR
                       PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OR APPLICATION NUMBER: 60/01
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/01
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/01
OR APPLICATION NUMBER: 60/01
OR APPLICATION NUMBER: 60/01
OR FILING DATE: 1998-03-31
OR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                 OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-15
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NR APPLICATION NUMBER: 60/01
RR FILING DATE: 1998-04-01
RR PRICATION NUMBER: 60/01
RR FILING DATE: 1998-04-01
RR APPLICATION NUMBER: 60/01
RR APPLICATION NUMBER: 60/01
RR APPLICATION NUMBER: 60/01
RR APPLICATION NUMBER: 60/01
                                                                                                                                                                                                                                          R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-
                                              R FILING DATE:
R APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-0.
APPLICATION NUMBER:
FILING DATE: 1998-0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                  APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION N
FILING DATE:
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                 FILING DATE:
APPLICATION !
                                                                                                         FILING DATE:
APPLICATION
                                                                                                                                 FILING DATE: APPLICATION
                                                                                                                                                         FILING DATE:
APPLICATION
                                                                                                                                                                                 FILING DATE: APPLICATION
                                                                                                                                                                                                        APPLICATION
                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                             APPLICATION
                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING
                                                                                                                                            DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DATE:
                                              NUMBER: 60
                                                                                                                                                                                                                                                                                                                            NUMBER: 60/081838
                                     NUMBER:
                                                                                  NUMBER:
                                                                                                          NUMBER:
                                                                                                                                  NUMBER:
                                                                                                                                                          NUMBER:
                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                        NUMBER:
                                                                                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER: 60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-
                                                                       1998-04-
                                                                                                                                                                                                                                             1998-04-22
                                                                                                                                                                                                                                                                                          1998-04-
                                                                                                                                                                                                                                                                                                                                                                1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-03-27
                                                                                               1998-04-
                                                                                                                    1998-04-27
                                                                                                                                                                     1998-04-
                                                                                                                                                                                             1998-04-22
                                                                                                                                                                                                                    1998-04-22
                                                                                                                                                                                                                                                                  1998-04-21
                                                                                                                                                                                                                                                                                                                  1998-04-15
                                                                                                                                                                                                                                                                                                                                          1998-04-15
                                                                                                                                             1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                        1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/080105
                                                                                60/083392
            60/083499
                                    60/083496
                                                            60/083495
                                                                                                          60/083322
                                                                                                                                  60/083336
                                                                                                                                                         60/082796
                                                                                                                                                                                  60/082797
                                                                                                                                                                                                          60/082700
                                                                                                                                                                                                                               60/082804
                                                                                                                                                                                                                                                       60/082704
                                                                                                                                                                                                                                                                               60/082569
                                                                                                                                                                                                                                                                                                     60/082568
                                                                                                                                                                                                                                                                                                                                                     60/081952
                                                                                                                                                                                                                                                                                                                                                                                                     60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                             60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/079786
```

```
Query Match
Best Local Similarity
Matches 1673; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                        PRIOR PRIOR PRIOR
                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                     DR APPLICATION NUMBER: 60/08
R FILLING DATE: 1998-05-07
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-05-07
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-05-13
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-05-13
DR FILLING DATE: 1998-05-13
DR FILLING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                           R FILING DATE: 1998-05:
R APPLICATION NUMBER: (
R FILING DATE: 1998-05:
R FILING DATE: 1998-05:
                                                                                                            R APPLICATION NI
R FILING DATE: (R APPLICATION NO
R FILING DATE: (R FILING DATE: (R FILING DATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAPPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-20 Apprica-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/084637 ETILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084639 ETLING DATE: 1998-05-07 APPLICATION NUMBER: 60/084640
                                                           APPLICATION
FILING DATE:
                                                                                   APPLICATION N
FILING DATE:
                                                                                                                                                                              FILING DATE: APPLICATION
                                                                                                                                                                                                                                   FILING DATE: APPLICATION N
                                                                                                                                                                                                                                                             FILING DATE:
APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/084414
FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-0
APPLICATION NUMBER:
FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/083545
FILING DATE: 1998-04-29
                                                                                                                                                                   FILING DATE: 1998-05-15
                                                                                                                                                                                                         APPLICATION
                                                                                                                                                                                                                        FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATE:
                                                           DATE:
                                                                                                             NUMBER: 60
                                                                                   NUMBER: 60/0: 1998-05-15
                                                                        NUMBER: 60/085697
                                                                                                                                                     NUMBER:
                                                                                                                                                                              NUMBER:
                                                                                                                                                                                                         NUMBER:
                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-29
                                                           1998-05-15
                                                                                                                                                                                              1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-30
                                                                                                                                        1998-05-15
                                                                                                                                                                                                                                                  1998-05-
                                                                                                                                                                                                                                                                             1998-05-
                   98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                               60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/083559
                                                                                                                                                       60/085580
                                                                                                                                                                                60/085579
                                                                                                                                                                                                          60/085689
                                                                                                                                                                                                                                                                                         60/085323
                                                                                                                                                                                                                                                                                                                  60/085338
                                                                                                                                                                                                                                                                                                                                                                      60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                          60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084598
                                                                                                                          60/085573
                                                                                                                                                                                                                                   60/085700
                                                                                                                                                                                                                                                             60/085582
                                                                                                                                                                                                                                                                                                                                             60/085339
      Score 1661.4; DB 36
Pred. No. 1.2e-236;
0; Mismatches 1;
                                 DB 36;
                               Length 1679;
```

ΩV 뫄 2 밁 Qy DЪ 8 125 181 121 61 66 σ gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60 acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaagaagaaga atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 120 gtocttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct Conservative 0; Indels 1; Gaps 240 184 180 124 65 ۳.

```
Qy
                                                                 В
                                                                                            δÃ
                                                                                                                                В
                                                                                                                                                          γQ
                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                 ДĎ
                                                                                                                                                                                                                                                                                                                                 Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
     Вb
                                                                                                                                                                                                  1085
                                                                                                                                                                                                                                                                 1025
                                                                                                                                                                 1141
                                                                                                                                                                                                                                                                                                  1021
                                  1261
                                                                                                                                                                                                                                                                                                                                  965
                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                    905
                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                             atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccttcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                   gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                  ccaccaccaccaccaacaacagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                 gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctgctcttctggtc
                                                                                                                                                                                                                                                                               tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
ccaccaccaccaccaccaccaccaccagcaatggcaacaccagcaatcagatatata
                                                                                                                               ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtc
                                                                                                                                                                                                                                                              \verb|tccaaceaagctgggccaceaccaatgccagcatcatgctatttggtccaggcgccgtcagc|
                                                                                                                                                                                                                                                                                                                                                                                                gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 accytyaactatccaccatacatttcayaayccaaygytacayytytccccytyyyacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                 1084
                                                                                                                                                                                                                                                                                                                                  1024
                                                                                                                                                                                                                                                                                                                                                                   1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844
                                                                 1264
                                                                                                                                1204
                                                                                                                                                               1200
                                                                                                                                                                                                1144
                                                                                                                                                                                                                                 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             304
                                                                                                                                                                                                                                                                                                                                                                                                  964
                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           244
```

Qy Вþ δõ В ΔÃ Ъ 80 B δÃ 맔 Qy DЬ Qy Дb Ωy В Š B

δÃ

ΔÃ

Qy Db QY Дb Ωy DЬ δλ

```
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Pol
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C10
CURRENT APPLICATION NUMBER: US/09/978,194A
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/918585
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/06249
PRIOR APPLICATION NUMBER: 60/063311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065364
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065664
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-978-194A-522
: Sequence 522, Apr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 522, Applicat GENERAL INFORMATION: APPLICANT: Ashkenazi, APPLICANT: Baker Kev
                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aatactttggggggaaaaagttttaaaaaagaaattgaaaaattgccttgcagatattta 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aatactttggggggaaagattttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                   Godowski, Paul J.
Grimaldi, J. Chrisi
Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fong,
                                                                                                                                                                                                                                                                                                                 Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                       Kljavin, Ivar
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goddard,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ferrara, Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eaton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Botstein, David
Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                        Paoni, Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                        Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                    Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09978194A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Αvi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     סי
                                                                                                                                                                                                                                                     Polypeptides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1679
                                                                                                                                                                                                                                                       Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1500
```

PRIOR PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR OR FILING DATE: 1998-03-10
OR APPLICATION NUMBER: 60/077632
OR FILING DATE: 1998-03-11
OR APPLICATION NUMBER: 60/077641
OR FILING DATE: 1998-03-11
OR APPLICATION NUMBER: 60/077649
OR APPLICATION NUMBER: 60/077791
OR APPLICATION NUMBER: 60/077791
OR APPLICATION NUMBER: 60/077791
OR APPLICATION NUMBER: 60/077791
OR FILING DATE: 1998-03-12 OR FILING DATE: 1998-03-31
PR APPLICATION NUMBER: 60/080107
OR FILING DATE: 1998-03-31
PR APPLICATION NUMBER: 60/080165
OR FILING DATE: 1998-03-31
PR APPLICATION NUMBER: 60/080194 R APPLICATION NUMBER: 6
R FILING DATE: 1998-04R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-IR FILING DATE: 1998-04-08
RE APPLICATION NUMBER: 60/08
RE FILING DATE: 1998-04-08
RE APPLICATION NUMBER: 60/08
RE FILING DATE: 1998-04-08
RE FILING DATE: 1998-04-08
RE FILING DATE: 1998-04-08 RR APPLICATION NUMBER: 60/08 RF FILING DATE: 1998-04-01 RF FILING DATE: 1998-04-01 RR APPLICATION NUMBER: 60/08 RF FILING DATE: 1998-04-01 RR FILING DATE: 1998-04-01 RR FILING DATE: 1998-04-01 RR FILING DATE: 1908-04-01 RF FILING DATE: 1908-04-04-01 RF FILING DATE: 1908-04-01 RF FILING DATE: 1908-04-01 RF FILING DATE R APPLICATION NUMBER: 60 R FILING DATE: 1998-03-2 R APPLICATION NUMBER: 60 R FILING DATE: 1998-03-2 R APPLICATION N R FILING DATE: R APPLICATION N FILING DATE: 1998-0: APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION N FILING DATE: FILING DATE: 1998-0: APPLICATION NUMBER: FILING DATE: 1998-0: FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 FILING DATE: 1998-03-APPLICATION NUMBER: 6
FILING DATE: 1998-03-APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER: APPLICATION P APPLICATION NUMBER: 60 FILING DATE: 1998-03-APPLICATION NUMBER: 60/ FILING DATE: 1998-03-13 APPLICATION NUMBER: FILING DATE: 1998-0-APPLICATION NUMBER: FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30 APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: 1998-0.
APPLICATION NUMBER: FILING APPLICATION NUMBER: DATE: 1998-04-NUMBER: NUMBER: NUMBER: 1998-04-1998-03-1998-03-1998-03-1998-03-1998-04-15 1998-04-09 1998-03-1998-03-1998-04-: 60/079728)3-27 60/079786 3-27 60/079663)3-27 60/081229 60/081203 60/079656 60/078910 60/078936 60/080105 60/079920 60/078939 60/081071 60/080333 60/079689 60/079664 60/079294 60/078886 60/078004 60/081952 60/081817 60/081955 60/081195 60/081049 60/081070 60/080334 60/080328 60/080327

R FILING DATE: R APPLICATION N R FILING DATE:

1998-05-1

60/085689

R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N

NUMBER:

1998-05-13

: 1998-05-15 NUMBER: 60/

60/085700 60/085582

1998-05-15

N NUMBER: 60/0 E: 1998-05-07 N NUMBER: 60/0 E: 1998-05-13

: 1998-05-1 NUMBER: 60

60/085323 60/085338 60/085339 60/084643

NUMBER:

PRIOR FILING DATE: 1998-04-27
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/083392 PRIOR PRIOR FILING PRIOR APPLICATION NUMBER: 60/082804 PRIOR FILING DATE: 1998-04-22 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0 PRIOR FILING DATE: R FILING DATE: 1998-05 R APPLICATION NUMBER: (R FILING DATE: 1998-05 R APPLICATION NUMBER: (R APPLICATION N
R TILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N FILING LALL. BAPPLICATION NUMBER: 60/U PILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083545
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554 FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083496
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083499
FILING DATE: 1998-04-29 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/ FILING DATE: 1998-05-07 FILING DATE: 1998-05 APPLICATION NUMBER: FILING DATE: 1998-01 APPLICATION NUMBER: FILING DATE: 1998-04-30 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083742 FILING DATE: FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083559 FILING DATE: FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083495 APPLICATION NUMBER: 60/083336 APPLICATION NUMBER: 60/082796 FILING APPLICATION NUMBER: 60/082797 APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22 APPLICATION DATE: DATE: NUMBER: NUMBER: 60/084627 : 1998-05-07 NUMBER: 60/084414 NUMBER: 60/083500 1998-05-05 1998-04-23 1998-04-22 1998-04-21 1998-04-1998-04-1 1998-05-07 1998-05-07 1998-05-07 1998-05-06 1998-05-06 1998-04-29 1998-04-22 60/081838)4-15 60/082704 60/084598 60/084640 60/084639 60/084441 60/084366 60/083558 60/084600 60/084637

```
.. .. .. .. .. .. .. .. ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ŋ,
                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
 밁
                  γQ
                                                  Ъ
                                                                          δÃ
                                                                                                        DЬ
                                                                                                                             Q
                                                                                                                                                             밁
                                                                                                                                                                                    Qy
                                                                                                                                                                                                                 DЬ
                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                     Д
                                                                                                                                                                                                                                                                                            ΩŽ
                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
 845
                          841
                                                                                                         725
                                                                                                                                                               665
                                                                                                                                                                                       661
                                                                                                                                                                                                                    605
                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                       545
                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                           485
                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                               425
                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                   365
                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OR FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085573
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085704
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085697
OR FILING DATE: 1998-05-15
                                                    785
                                                                              781
                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-10
APPLICATION NUMBER: 60/085580
TITING DATE: 1998-05-15
60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacatct
                                                                                                                       gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaaggtc
                                                                                                                                                                                                                               atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                       attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                    attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                            tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      атсаддавадавадавад-вавававседавестдасвавававадавдаваны вадавда
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atcaggaaagaaagaaaaaaaaaaccgaacctgacaaaaaaagaagaaaaaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaaeacaatct
aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
               aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                          ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcigtcaggg
                                                                                                                                                                                                                 atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                          cagacagacaaccaacagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                        cagacagacaaccaaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                              tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacaccngctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                  accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                            ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                  gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                        gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1661.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .2e-236;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184
                                                                                                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
 904
                                                                             840
                                                                                                                                  780
                                                                                                                                                                                                                   664
                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                          544
                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                  844
                                                                                                         784
                                                                                                                                                               724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۳
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                 γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вþ
                            QY
                                                         맑
                                                                                    QY
                                                                                                                     밁
                                                                                                                                              Qy
                                                                                                                                                                                Вb
                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                   D
                                                                                                                                                                                                                                                                                                                            γQ
                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                      ζ.
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
   밁
 1625
                               1621
                                                           1565
                                                                                                                      1505
                                                                                                                                                   1501
                                                                                                                                                                                1445
                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                         1385
                                                                                                                                                                                                                                                                                                    1325
                                                                                                                                                                                                                                                                                                                                                              1265
                                                                                                                                                                                                                                                                                                                                                                                          1261
                                                                                                                                                                                                                                                                                                                                                                                                                      1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
              actytyccaccacygcytytyttytyaaacytyaaataaaaagycaaaaaaaaa
                                                                                                                                cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                             ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                       ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                               aatactttggggggaaaaagtttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                         ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctgctcttctggtc 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcggcggtcagc 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tcaaaactcatcttcttccaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gatgacaaaagactgattgaaggaaaggagaggtgaaagtggaaaacagacctttcctc
atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                           ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc 1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc 1024
                                                         atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                             ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                       ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                 aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                     ccaccaccaccaccaccaccaccaccaccatcagcaatgcaatcaccaccaccaccaatcagatatata
                                                                                                                   cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                               1675
    1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                      1440
                                                                                                                                                                                                                                                                                                                                1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             964
                                                                                                                                                    1560
                                                                                                                                                                                  1504
                                                                                                                                                                                                              1500
                                                                                                                                                                                                                                          1444
                                                                                                                                                                                                                                                                                                    1384
                                                                                                                                                                                                                                                                                                                                                              1324
                                                                                                                                                                                                                                                                                                                                                                                                                          1264
                                                             1624
                                                                                                                        1564
                                                                                          1620
```

Sequence 522, Application US/09978295A
GENERAL INFORMATION:

APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan
APPLICANT: Ferrara, Napoleon
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Goddwski, Paul J
APPLICANT: Grinaldi, J. Christopher
APPLICANT: Grinaldi, J. Christopher
APPLICANT: Gurney, Austin L.

US-09-978-295A-522

```
CURRENT APPLICATION NUMBER: US/09/978,295A
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065364
PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                              PRIOR
PRIOR
PRIOR
                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                               PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/
PRIOR TILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-03-
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-03 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1997-1: PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: P2630P1C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60 PRIOR FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-03
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-03
                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-0: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION N
PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-0:
                 FILING DATE:
APPLICATION N
                                                                                                                              FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                      FILING DATE:
FILING
                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Roy, Marg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hillan, Kenneth
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-03-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nicholas F
                                                                                                                                                                                                                            1998-03-
                                                                                                                                                                                                                                                                   1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1997-11-
                                                                                                                                                  1998-03-30
                                                                                                                                                                                      1998-03-30
                                                                                                                                                                                                                                                                                                     1998-03-
                                                                                                                                                                                                                                                                                                                                                                                   1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-03-1
 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                      1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .998-03-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  David L.
                                                                                                                                                                                                                                                                   : 60/079728
)3-27
                                                                                                                                                                                                                                                                                                                                               60/079689
                                                                                                                                                                                                                                                                                                         60/079663
3-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/079294
3-25
                 60/080194
                                                                                                                                                                    60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                        60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/077632
                                                                                                                                60/080105
                                                                                                                                                                                                        60/079920
                                                                                                                                                                                                                                                                                                                                                                                                  60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/077450
                                                       60/080165
                                                                                           60/080107
                                                                                                                                                                                                                                              60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic
                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/083545
PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: PRIOR APPLICATION !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1998-04-22 PRIOR APPLICATION NUMBER: 60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/082568
PRIOR FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/081195
PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/081049
PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/081070 PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/080333 PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/080327 PRIOR FILING DATE: 1998-04-01
                                                                                         PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04
APPLICATION NUMBER:
FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083336 FILING DATE: 1998-04-27 APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-0
APPLICATION NUMBER:
FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/080328
             APPLICATION NUMBER: FILING DATE: 1998-0
                                                   APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                         FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083742
                                                                                                                                              FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083500
                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/083392
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                             1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-01
               1998-05-06
                                                                                       1998-04-30
                                                                                                                                                                                                      1998-04-29
                                                                                                                                                                                                                                                                                                                       1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-1
                                                   1998-05-05
```

60/081838

60/082704

60/082796

60/083554

60/083559

60/084414 60/084366 60/083499

60/081071

60/081955

60/080334

```
B
                             γQ
                                                               В
                                                                                           Qy
                                                                                                                            ğ
                                                                                                                                                      Qγ
                                                                                                                                                                                      В
                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
    425
                                   421
                                                               365
                                                                                             361
                                                                                                                             305
                                                                                                                                                           301
                                                                                                                                                                                          245
                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                   125
                                                                                                                                                                                                                                                     185
                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                               66
                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 gtccttcagcasaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                            σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/084600 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/084637
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084639
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085697
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/085580 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085700
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/084643 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/084640 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-07
              tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                              aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                              tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                          gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccgaaacgcag
                                                                              gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag 420
                                                                                                                        actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                          actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                     ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                     ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                 acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                  acggggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                            atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 124
                                                                                                                                                                                                                                                                                                                                                                                                                                          gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 65
                                                                                                                                                                                                                                                                                                              aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      h 98.1%; Score 1661.4;
Similarity 99.9%; Pred. No. 1.2e
73; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .2e-236;
es 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 36; Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Gaps
                                480
 484
                                                            424
                                                                                                                          364
                                                                                                                                                       360
                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                      304
                                                                                                                                                                                                                                                 244
                                                                                                                                                                                                                                                                                                               184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۲.
```

55 6		50	Db ;
	. CCCACAGAGTaCCCCCACATGAGAACATTCCCYYTYCCAYCYCYACACAGYYYCCCAGCCAAATTCCCY	50	Q {
1500	ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg	4 4	P 4
44	ggtacaatggagttttcttttcccaaacgggaagaacacagcacaccccggcttggaccca		dg d
1440	ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca	w	Qy
38		N	Db
1380	aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta	32	Qy
	caaatgaaattagaagaaacacagcctcatgggacagaaatttgagggagg	N	Db
1.1	caaatgaaattagaagaaacacagcctcatgggacagaaatttgagggagg	26	Qy
1264	ccaccaccaccaccaacacaacagcaatggcaacaccgacagcaaccaatcagatatata	N	DЪ
N	ccaccaccaccaccacacacagcaatggcaatgcaccgacagcaaccaatcagatatata	1201	Qy
1204	ttgcacctgcttctcaaat		Db
1200	ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgcc	.14	Qy
1144	gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcttcttgttc	30	Db
1140	gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc	0	Qy
1084	tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc	1025	DЬ
1080	tocaacaagctgggccacaccaatgccatgctatttggtccaggcgcgtcag	02	Qy
1024	tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc	6	Db
1020	tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggc	961	Qy
964	gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaacagacctttcctc	0	Db
960	yatgacaaaagactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcct	901	Qy
904	aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag	4	Db
900	aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag	4	Qy
844	acogtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa		Db
840	accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa	œ	Qy
784	gactacgagtgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtc	725	Db
780	. gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc		Qy
724	gctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg	665	Db
720	ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg	6	Qy
664	atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt		Db
660	atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt	0	Qy
504	artgragagarttortoagarartotocartaatgaagggaacaatattagcotoacotgo	5 4 5 4 5	D 43
5 4	の本子とものできます。 サーストゥー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・		>
4	Capacagacaaccaaccaaaaaacctttagggtccaccttcattgtgcaagtatgtcccaaa	485	B 1
540	agacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa	481	VQ

```
Sequence 522, Application Us

GENERAL INFORMATION:

APPLICANT: Ashkenazi, Avi

APPLICANT: Baker Kevin P.

APPLICANT: Botstein, David

APPLICANT: Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-978-298A-522
                                                                                                                                                                                  CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/918885
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILLING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C2 CURRENT APPLICATION NUMBER: US/09/978,298A
                                PRIOR APPLICATION NUMBER: 60/078936
PRIOR FILING DATE: 1998-03-20
                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                     APPLICATION NUMBER: 60/078004 FILING DATE: 1998-03-13
                                                                                                                                       APPLICATION NUMBER: 60/077791 FILING DATE: 1998-03-12
 APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20
                                                                                   APPLICATION NUMBER:
                                                                                                                                                                         FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, P. M
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ferrara, Napoleon Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kljavin, Ivar
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Goddard,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Botstein, David
Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09978298A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nicholas F.
                                                                       1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . Mickey
                                                                                       60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic
                                                   PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079656
PRIOR FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OR APPLICATION NUMBER: 60/080333
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080334
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/081070
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081071
OR FILING DATE: 1998-04-08
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081071
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081071
OR FILING DATE: 1998-04-08
                                                                                                                                                    OR FILING DATE: 1998-04:
OR APPLICATION NUMBER: (0)
OR FILING DATE: 1998-04:
OR APPLICATION NUMBER: (1)
OR APPLICATION NUMBER: (1)
OR FILING DATE: 1998-04:
                                                                                                                                                                                                                                      R APPLICATION NUMBER: 6
R FILING DATE: 1998-04
RR APPLICATION NUMBER: 6
RR FILING DATE: 1998-04
RR FILING DATE: 1998-04
RR FILING DATE: 1998-04
RR APPLICATION NUMBER: 6
RR APPLICATION NUMBER: 6
RR APPLICATION NUMBER: 6
                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/
FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080107
FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/0
FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079786
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/079663
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/079294
FILING DATE: 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/078939
                                                APPLICATION NUMBER: 60/
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04-08
                                 APPLICATION NUMBER: 60/082796
                                                                                   FILING DATE:
                                                                                                     APPLICATION NUMBER:
              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
NUMBER: 60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-09
                                                                                                                    1998-04-
                                                                                                                                                     1998-04-22
                                                                                                                                                                                                                         1998-04-
                1998-04-23
                                                                                   1998-04-22
                                                                                                                                                                                         1998-04-21
                                                                                                                                                                                                                                                                                           1998-04-
                                                                                                                                                                                                                                                                                                                           1998-04-
                                                                                                                                                                                                                                                                                                                                                               1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-
                                                                                                                                                                                                                                                           1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/079923
                                                                                                                                                                     60/082704
                                                                                                                                                                                                                                           60/082568
                                                                                                                                                                                                                                                                                                                                                                               60/081817
                                                                                                                                                                                                                                                                                                                                                                                                               60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/081229
                                                                                                   60/082700
                                                                                                                                                                                                                                                                           60/081838
                                                                                                                                                                                                                                                                                                             60/081952
                                                                                                                                                                                                                                                                                                                                               60/081819
                                                                   60/082797
                                                                                                                                     60/082804
                                                                                                                                                                                                       60/082569
```

```
Ъ
                                              QY
                                                                                                                      Query
Best 1
                                                                                                Best Local Similarity
Matches 1673; Conserv
                                                                                                                                                                                                                                                                 PRIOR

                                                                                                                                                                                              PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                RR APPLICATION NUMBER: 60, RR FILING DATE: 1998-05-0; RR FILING DATE: 1998-05-1; RR APPLICATION NUMBER: 60, RR APPLICATION NUMBER: 60, RR FILING DATE: 1998-05-1; RR FILING DATE: 1998-05-1; RR FILING DATE: 1998-05-1; RR APPLICATION NUMBER: 60, RR APPLICATION NUMBER: 60, RR APPLICATION NUMBER: 60, RR APPLICATION NUMBER: 60, RR FILING DATE: 1998-05-1; RR FILING DATE: 1998-05-1; RR APPLICATION NUMBER: 60, RR APPLICATION NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DR FILING DATE: 1998-05-07
DR APPLICATION NUMBER: 60/08
DR APPLICATION NUMBER: 60/08
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-29
DR FILING DATE: 1998-04-29
DR FILING DATE: 1998-04-29
DR FILING DATE: 1998-04-30
DR FILING DATE: 1998-04-30
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-05-05
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-05-06
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-05-06
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-05-06
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DR FILING DATE: 1998-04-27

BR APPLICATION NUMBER: 60/08

BR ETLING DATE: 1998-04-28

BR APPLICATION NUMBER: 60/08

BR APPLICATION NUMBER: 60/08

BR FILING DATE: 1998-04-29

BR APPLICATION NUMBER: 60/08
                                                                                                                                                                                         R FILING DATE:
R APPLICATION N
FILING DATE:
         σ
                                                   -
                                                                                                                                               Match
                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 6
FILING DATE: 1998-05-
APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-1
APPLICATION NUMBER: 60
FILING DATE: 1998-05-1
Conservative
                                                                                                                                                                                           NUMBER: 6: 1998-05-
                                                                                                                                                                                                                                             1998-05-
                                                                                                                    98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084643
5-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/084639
5-07
                                                                                                                                                                                                                    60/085697
                                                                                                                                                                                                                                                                   60/085704
                                                                                                                                                                                                                                                                                                                60/085573
                                                                                                                                                                                                                                                                                                                                                               60/085580
                                                                                                                                                                                                                                                                                                                                                                                                           60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083322
                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                    77
                                                                                             0
                                                                                             Score 1661.4;
Pred. No. 1.2e
0; Mismatches
                                                                                             .2e-236;
les 1;
                                                                                                                                            DB
                                                                                                                                            36;
                                                                                             Indels
                                                                                                                                          Length
                                                                                                                                            1679;
                                                                                             ⊬,
                                                                                         Gaps
                                                                                           ۲.
                      없
                                                      Qy
                                                                                                               g
                                                                                                                                                         Qy
                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δõ
                      1085
                                                                                                                 1025
                                                                  1081
                                                                                                                                                              1021
                                                                                                                                                                                                             965
                                                                                                                                                                                                                                                                                                           905
                                                                                                                                                                                                                                                                                                                                                                                                      845
                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaaagaagaagaaaagaaga
                                       gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                tccaacaagctgggccacaccaatgccatgcatcattttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                             aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gactacgagtgcagtgcctccaatgacgtggccgcgcgccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cagacagacaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ttccccaaagctatggacaacgtgacggtccggccaggggggagagcgccaccctcaggtgc
                 gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctctcttctggtc
                                                                                                       tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                 tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacactttgcgtggcc
                                                                                                                                                                                                                                                                                                      gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                               gatgacaaaagactgattgaaggaaaggagaggggtgaaagtggaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                    aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaaga
                                                                                                                                                                                                        tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                             1140
                                                                                                                                                              1080
                                                                                                                                                                                                             1024
                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                               1084
                                                                                                                                                                                                                                                                                                           964
                                                                                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                                                                                                    904
                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184
```

APPLICANT: Stewart, Timothy A. APPLICANT: Williams, P. Mickey APPLICANT: Williams, P. Mickey APPLICANT: Wood, William I. TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C3 CURRENT APPLICATION NUMBER: US/09/978,299A CURRENT FILING DATE: 2001-10-15	APPLICANT: KLjavin, Ivar J. APPLICANT: Kuo, Sophia S. APPLICANT: Napher, Mary A. APPLICANT: Pan, James; APPLICANT: Paoni, Nicholas F. APPLICANT: Roy, Margaret Ann APPLICANT: Shelton, David L.		A-522 2, Appli ORMATION Ashkena Baker Botste Botste Eaton, Ferrar Filvar			Qy 1321 aatactttgggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta 1380	Qy 1141 ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 1200 Db 1145 ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 1204 Qy 1201 ccaccaccaccaccaccaacaacaacaacaacaacaaca
PRIOR FILLING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/081070 PRIOR APPLICATION NUMBER: 60/081070 PRIOR FILLING DATE: 1998-04-08 PRIOR PRIOR FILLING DATE: 1998-04-08 PRIOR APPLICATION NUMBER: 60/081071 PRIOR APPLICATION NUMBER: 60/081195 PRIOR APPLICATION NUMBER: 60/081195 PRIOR FILLING DATE: 1998-04-08 PRIOR FILLING DATE: 1998-04-08 PRIOR FILLING DATE: 1998-04-08 PRIOR APPLICATION NUMBER: 60/081203	FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0	PRIOR APPLICATION NUMBER: 60/080105 PRIOR TILING DATE: 1998-03-31 PRIOR APPLICATION NUMBER: 60/080107 PRIOR FILING DATE: 1998-03-31 PRIOR PRIOR PRICED NUMBER: 60/080165 PRIOR APPLICATION NUMBER: 60/080194 PRIOR APPLICATION NUMBER: 60/080327 PRIOR APPLICATION NUMBER: 60/080327	APPLICATION NUMBER: 6 FILING DATE: 1998-03-	PRIOR APPLICATION. NUMBER: 60/078939 PRIOR TILING DATE: 1998-03-20 PRIOR PILING DATE: 1998-03-25 PRIOR PPLICATION NUMBER: 60/079656 PRIOR PPLICATION NUMBER: 60/079656 PRIOR PILING DATE: 1998-03-26 PRIOR APPLICATION NUMBER: 60/079664 PRIOR FILING DATE: 1998-03-27	APPLICATION DAY APPLICATION DA	PRIOR FILING DATE: 1998-03-10 PRIOR APPLICATION NUMBER: 60/077632 PRIOR APPLICATION NUMBER: 60/077641 PRIOR APPLICATION NUMBER: 60/077641 PRIOR FILING DATE: 1998-03-11 PRIOR APPLICATION NUMBER: 60/077649 PRIOR FILING DATE: 1998-03-11 PRIOR APPLICATION NUMBER: 60/077791 PRIOR APPLICATION NUMBER: 60/077791	APPLICATION N FILING DATE: APPLICATION N FILING DATE: APPLICATION N FILING DATE: APPLICATION N FILING DATE: APPLICATION N FILING DATE: APPLICATION N FILING DATE:

1998-04-09

```
PRIOR
                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OR APPLICATION NUMBER: 60/082700
OR FILLING DATE: 1998-04-22
OR APPLICATION UNMER: 60/082797
OR FILLING DATE: 1998-04-27
OR APPLICATION NUMBER: 60/082796
OR FILLING DATE: 1998-04-23
OR APPLICATION NUMBER: 60/083336
OR FILLING DATE: 1998-04-28
OR APPLICATION NUMBER: 60/083322
OR FILLING DATE: 1998-04-28
OR APPLICATION NUMBER: 60/083392
OR APPLICATION NUMBER: 60/08392
OR FILLING DATE: 1998-04-29
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083496
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                        DR APPLICATION NUMBER: 60, PR FILING DATE: 1998-04-29
DR APPLICATION NUMBER: 60, DR THILING DATE: 1998-04-29
DR FILING DATE: 1998-04-20
DR FILING DATE: 1998-04-20
DR FILING DATE: 1998-04-30
DR FILING DATE: 1998-05-06
DR FILING DATE: 1998-05-06
DR FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PR FILING DATE: 1998-04-21
PR APPLICATION NUMBER: 60/06
PR FILING DATE: 1998-04-21
PR APPLICATION NUMBER: 60/08
PR FILING DATE: 1998-04-22
PR APPLICATION NUMBER: 60/08
PR FILING DATE: 1998-04-22
PR FILING DATE: 1998-04-22
                                                                                                                       R FILING DATE:
R APPLICATION NI
R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R FILING DATE:
R APPLICATION N
R FILING DATE:
                                                                               APPLICATION |
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/
FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083554
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION |
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 6 FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DATE:
                                                                                                                                                                 N NUMBER: 60/C
E: 1998-05-07
                                                                                                      NUMBER:
                                                                                                                                              NUMBER:
                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                          NUMBER:
                                                                                                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER: 60: 1998-04-1
                      NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER: 60/
: 1998-04-09
                                                                                  1998-05-07
                                                                                                                          1998-05-07
                                                                                                                                                                                                                1998-05-07
                                                                                                                                                                                                                                                                                                *UMBER: 60/084637
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-29
  1998-05-13
                                       1998-05-07
                                                                                                                                                                                                                                                        1998-05-07
                                                                                                                                                                                                                                                                                                                                          1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-1
                                                                                                   60/084627
                                                                                                                                                                                                                                  60/084640
                                                              60/084643
                                                                                                                                              60/084600
                                                                                                                                                                                          60/084598
                                                                                                                                                                                                                                                                            60/084639
                   60/085339
                                                                                                                                                                                                                                                                                                                                                              60/084441
                                                                                                                                                                                                                                                                                                                                                                                                      60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/082704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/081229
```

A.

720 664 660 604 600 544 540

724

484

480

424 420 360

304 300 244 240 184 180

364

```
δÃ
    B
                                                              밁
                                                                                        δÃ
                                                                                                                        Ъ
                                                                                                                                                  Qy
                                                                                                                                                                                   뭥
                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                        맗
                                                                                                                                                                                                                                                                                                                                 δÃ.
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŠÕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Sim
Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
    665
                                661
                                                              605
                                                                                          601
                                                                                                                        545
                                                                                                                                                    541
                                                                                                                                                                                   485
                                                                                                                                                                                                             481
                                                                                                                                                                                                                                           425
                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                      365
                                                                                                                                                                                                                                                                                                                                                                305
                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                           245
                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NR FILING DATE: 1998-05-
BR APPLICATION NUMBER: 6
BR APPLICATION NUMBER: 6
BR APPLICATION NUMBER: 6
BR FILING DATE: 1998-05-
BR FILING DATE: 1998-05-
BR FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R APPLICATION |
R FILING DATE:
R APPLICATION |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 1998-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60 FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION : FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
              ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg
                                                         atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                         atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                    attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                  attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                            cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                       tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacaccttgctcggtg
                                                                                                                                                                                                                                                                                                 gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                             actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                         actattgacaaccgggtcacccgggttggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                    ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acggggctggctgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcaggaaagaaagaaagaaaaaaaaaccgaacctgacaaaaagaagaagaagaagaaga
                                                                                                                                                                              cagacagacaaccacacaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                        tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                   gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                   ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: 1998-05-15
N NUMBER: 60/0
E: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER: 60: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : 1998-05-15
NUMBER: 60/085697
: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1661.4; DB 3
Pred. No. 1.2e-236;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1679;
```

1; Gaps

۲,

```
US-09-978-585-522
                                                                                                                                         Вþ
                                                                                                                                                               Qy
                                                                                                                                                                                            g
                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                      DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                    Sequence 522, Application US/09978585 GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin p
APPLICANT: Botstein, Davi
APPLICANT: Desnoyers, Luc
                                                                                                                                                                                              1565
                                                                                                                                                                                                                                                                                                          1445
                                                                                                                                                                                                                                                                                                                                                                1385
                                                                                                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                      1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1145
                                                                                                                                                                                                                                                    1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1025
                                                                                                                                                                   1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                   atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                              cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                    ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                        atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                       ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                 aatactttggggggaaaagagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                               aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccaccaccaccaccaccacacagcaatggcaacaccggcagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             accytyaactatccaccatacatttcagaayccaaygytacayytytccccytygyacaa
                                                                                                                                                                                                                                               cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                     ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccaagggctcagcctctctg
                                                                                                                                                                                                                                                                                                                                                             ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccaccaccaccaccaccaccagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gaggtgagcaacgcacgtcgaggagggcaggctgcgtctggctgctgctctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             accytyaactatccaccatacatttcayaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggaggagtaaaggtc
Botstein, David
Desnoyers, Luc
                                                                                                                                                                                           1624
                                                                                                                                                                                                                     1620
                                                                                                                                                                                                                                                 1564
                                                                                                                                                                                                                                                                           1560
                                                                                                                                                                                                                                                                                                     1504
                                                                                                                                                                                                                                                                                                                                 1500
                                                                                                                                                                                                                                                                                                                                                           1444
                                                                                                                                                                                                                                                                                                                                                                                       1440
                                                                                                                                                                                                                                                                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      784
       밁
                          δÃ
                                                             맑
                                                                                      Qy
                                                                                                                    묽
                                                                                                                                            Qy
                                                                                                                                                                         Вb
                                                                                                                                                                                                  Š
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                        ΔÃ
                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                              γQ
                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens US-09-978-585-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Prior Application removed SEQ ID NO 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 1673; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Secreted and TITLE OF INVENTION: Acids Encod: FILE REFERENCE: P2630P1C15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/978,585
CURRENT FILING DATE: 2001-10-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 1679
       425
                                                                                                                                                                                                                                 185
                                 421
                                                             365
                                                                                      361
                                                                                                                   305
                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                     125
                                                                                                                                             301
                                                                                                                                                                         245
                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                           66
                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                             1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                 tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                             actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                   ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                        acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                               aaaaaatcatgaaaaccatccagccaaaaatgcacaattctatcttttgggcaatcttc
tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                       999aatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag 420
                                                                                                                                                                                                                                                                                  aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                       atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaaagaagaagaagaagaaga 120
                                                       gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                               actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                      atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                              gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ferrara, Na
Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Williams, P. Mic
Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paoni, Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 1.20
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1661.4;
Pred. No. 1.26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transmembrane Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .2e-236;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
```

1679;

Gaps

۲,

65 60

180

124

184

480 424

364 360 304 300 244 240

484

and

Nucleic

```
δÃ
                                                                                                                    Qy
                                                                                                                                                                                Ş
                                                                                                                                                                                                                                              2
                                                                                                                                                                                                                                                                                                        Qy
   δõ
                                 В
                                                                                          В
                                                                                                                                                      В
                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                                                                                                                        DЪ
                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                 1505
                                                                                                                                                       1385
                                                                                                                                                                                                                   1325
                                                                                                                                                                                                                                                                                                                                                                                                    1145
1561 atagagacgaacagaatgagacetteeggeecaagegtggegetgegggeaetttggtag
                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                               1265
                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                          1205
                                                                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                                                                                                                  1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                      ctgcaagctgcatcgtgcaacctctttggtgccaagtgtgggcaaggggctcagcctctctg 1500
                                                                                                                                                                  ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca 1440
                                                                                                                                                                                                                                aatactttggggggaaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                          tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacactttgcgtggcc
                                            cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 1560
                                                                                                                                                 ggtacaatggagttttcttttcccaaacgggaagaacacagcaccccggcttggaccca
                                                                                                                                                                                                              aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                     ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                          cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 1564
                                                                                      ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                                                                                                         ccaccaccaccaccaccaccaccagcaatggcaaccaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                               ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                          \tt gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctgcttcttctggtc 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gatgacaaaagactgattgaaggaaaggagtggaaagtggaaaacagaacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggaggagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagagctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                        1504
                                                                                                                                                  1444
                                                                                                                                                                                                                1384
   1620
                                                                                                                                                                                                                                                                          1324
                                                                                                                                                                                                                                                                                                                                     1264
                                                                                                                                                                                                                                                                                                                                                                                                 1204
                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       544
```

٠.

```
밁
                        VΩ
                                                     В
                                                                           QУ
                                                                                                      р
                                                                                                                              Qy
                                                                                                                                                          밁
                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                           ; TYPE: DNA
; ORGANISM: Homo
US-09-978-585A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-978-585A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멇
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 522, Application:
                                                                                                                                                                                                                                                                                                                SEQ ID NO 522
LENGTH: 1679
                                                                                                                                                                                                             Matches 1673;
                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                          Prior Application removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/978,585A
CURRENT FILING DATE: 2001-10-16
NUMBER OF SEQ ID NOS: 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: P2630P1C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185
                            181
                                                     125
                                                                             121
                                                                                                       66
                                                                                                                               61
                                                                                                                                                          6
acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
              acggggctgctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                               aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                atcaggaaagaaagaaagaaaaaaccgaacctgacaaaaaagaagaagaaaagaagaaga
                                                                                                                                                                     gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                   atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaaaaaagaagaaga
                                                                                                                                                      gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                 aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wood, William I. \mbox{VENTION: Secreted} and Transmembrane Polypeptides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                            Williams,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gurney,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Paoni, Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09978585A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Napier, Mary A.
                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                      Acids Encoding the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                           P. Mickey
                                                                                                                                                                                                                      98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         סי
                                                                                                                                                                                                                                                                                                                                      See File Wrapper or Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ħ
                                                                                                                                                                                                            0;
                                                                                                                                                                                                                        Score 1661.4; DB 36; Pred. No. 1.2e-236;
                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                        Same
                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                     1679;
                                                                                                                                                                                                            <u>...</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1679
                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic
                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1624
                                                                                                                              120
                                                                                                                                                         65
 244
                          240
                                                    184
                                                                            180
                                                                                                    124
                                                                                                                                                                                                            سم
• •
```

1380	.321 aatac	Qy
1324	caaatgaaattagaagaaacacagcctcatggga	Dβ
່ເພ	.261 caaatgaaattagaagaaacacagcctcatgggacagaaatttgagggagg	Qy
1264	ccaccaccaccaacaacagcaatggcaacaccgacagcaaccaatcagata	Db
i	accaccaccaacacagcaatggcaacaccgacagcaaccaatcagatatata	Qy
1200	cacttccccacccggga	Db Qy
1144	085 gaggtgagcaacgtcgaggagggcaggctgcgtctggctgtgctgctcttctgg	Db
1140	aggtgagcaacggcacgtcgaggaggcaggctgcgtctggctgcctcttctggtc	Qy
1080 1084	aggcgccgtcagc	Db dd
Ñ	965 tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc	Db
1020	1 tcaaaactcatcttcttcaatgtotctgaacatgactatgggaactacactt	Qy
964	05 gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc	ДЪ
960	01 gatgacaaaagactgattgaaggaaaggaggtgaaagtggaaaacagacctttcctc	Qy
904	***	Db K
	o acceptionate the acception and the control of the	£ 5
4	81 accytyaactatccaccatacatttcagaayccaaygytacayytytccccytyyyacaa	Qy
784	- yarranyay-yaray-yarrananyanyay-yaray-yay-anyayayagagtaaaggto	B %
	о уусттутуаутуаауасуаатастууаааттсадуусатсасссдууаусадтсадуу	2 5
N (61 ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg	Qy
664	5 atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt	Db
660	tagcaactggtagaccagagcctacggttacttggagacacatctctccccaaagcggtt	Qy
õ		Db
	ttgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc	Qy
540 544	481 cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa	DP QA
8	25 tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg	Db
480	1 tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg	Qy
424	5 gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag	ΔQ
420	1 gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag	Qy
360 364	301 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct 	Qy Db
304	45 ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc	Дb
300	41 ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc	Qy

Db 1325 aatactttgggggaaaaggttttaaaaaaagagaaattgaaaattgactttta Qy 1381 ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca Db 1385 ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca Db 1385 ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca Db 1385 ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca Qy 1441 ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg							-				
altactttgggggaaaagggttttaaaaaagagaaattgaaattgaaaattgccttgcagat ggtacaatggagttttcttttcccaaaacgggaagaacacagcacacccggcttgg ggtacaatggagttttctttttcccaaaacgggaagaacacagcacacccggcttgg glilililililililililililililililililili	DЬ	Qy	Db	Qy	Db	Qy	Дb	Qy	DЪ	Qy	Db
attactttgggggaaaagattttaaaaagagaattgaaaattgacattgcagattatggttttcatttcccaaacgggaagaacacagcacacccggcttggaagattatcatttggggtttttcttttcccaaacgggaagaacacagcacacccggcttggaagattacaatggagttttcttttcccaaacgggaagaacaccagcacacccggcttggacgtll	1625			1561	1505	1501	1445	1441	1385	1381	1325
tta 1384 tta 1384 cca 1440 cca 1444 cca 1500 ctg 1504 ctg 1504 tcc 1564 tcc 1564 tcc 1564 tcg 1620 ctg 1624	actgtgccaccacggcgtgtgttgttgaaacgtgaaataaaaagagcaaaaaaaa	actgtgccaccacggcgtgtgttgtgaaacgtgaaataaaaagagcaaaaaaaa	_	_			ч –	ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg	_	_	

Search completed: July 12, 2002, 00:25:46 Job time: 13664 sec

```
Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
          Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                          3338.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
203.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            340.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             July 11, 2002, 22:53:23; Search time 102.16 Seconds (without alignments) 4070.649 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-700-397-2
1693
          11110000

1111000

111000

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

11100

110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383533 seqs, 122816752 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
/cgn2_6/ptodata/2/ina/5B_COMB.seq:*
/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
/cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/2/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
          DВ
                                                                                                                                                                                                                                                                                                                                     US-08-414-657D-5
US-08-414-657D-9
US-08-414-657D-8
US-08-414-657D-10
US-08-414-657D-10
US-08-414-657D-11
US-08-414-657D-11
US-08-414-657D-11
US-08-414-657D-11
US-08-414-657D-11
US-08-414-657D-11
US-08-414-657D-13
US-08-414-657D-14
US-08-414-657D-14
US-09-247-373B-33

US-09-014-969-14

US-09-817-180-1

US-09-841-127-5

US-08-964-127-5

US-08-969-5-06406A-21

US-08-165-414E-1

US-08-1185-414E-1

US-08-118-414-3

US-08-813-150-1

US-08-613-150-1

US-08-628-417-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-414-657D-7
US-08-414-657D-7
US-08-414-657D-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               767066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                               Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                      Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Séquence
   8, Appli
17, Appl
18, Appl
11, Appl
11, Appl
11, Appl
12, Appl
13, Appl
14, Appl
15, Appl
16, Appl
16, Appl
17, Appl
18, Appl
19, Appl
19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3, Appli
1, Appli
1, Appli
5, Appli
9, Appli
6, Appli
8, Appli
10, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-414-657D-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ဂ ဂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                             TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ŋ
```

45	44	43	42	41	40	39	38	37	36	35	34	S S	32	3	30	29	28	
45.2	45.4	45.4	45.6	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	46	46.2	46.2	46.2	46.4	
2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	
253	7218	1051	12980	9646	2184	1641	356	356	257	257	224	124	1798	9589	9589	1098	376	
ω	ப	4	ω	w	4	ר	4	N	4	N	N	σ	4	ب	μ	w	2	
US-08-520-678A-25	US-08-232-463-14	US-09-245-041-10	US-08-811-566-5	US-08-811-566-1	US-08-955-918C-1	US-08-300-903A-8	US-08-897-126-22	US-08-520-678A-22	US-08-897-126-24	US-08-520-678A-24	US-08-731-272A-26	5185243-1	US-09-797-906-1	US-07-925-695-2	US-07-925-695-1	US-09-248-335-35	US-08-623-906A-18	
Sequence 25, Appl	Sequence 14, Appl	Sequence 10, Appl	Sequence 5, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 8, Appli	Sequence 22, Appl	Sequence 22, Appl	Sequence 24, Appl	Sequence 24, Appl	Sequence 26, Appl	Patent No. 5185243	Sequence 1, Appli	Sequence 2, Appli	Sequence 1, Appli	Sequence 35, Appl	Sequence 18, Appl	

ALIGNMENTS

```
; FEATURE:
; NAME/KEY: Coding S
; LOCATION: 56...106
; OTHER INFORMATION:
US-08-414-657D-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/08414657D Patent No. 5861283 GENERAL INFORMATION:
                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building
CITY: Lawrenceville
                                                                                                                                                                                                                                            REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM CONTROL OPERATING SYSTEM: SOFTWARE: FastSE
                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                              TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08543
                                                                                                               nucleic acid
EDNESS: double
                                                                                                                                                1238 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FastSEQ for Windows Version
                                                    Coding Sequence
                                                                                               linear
                                         56...1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM Compatible SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08/414,657D
                                                                                                                                                                                         w
•••
                                                                                                                                                                                                                                                                                     317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  210
```

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                            Вb
                                                                                                                                                                                                                                             ρy
                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                       VΩ
                                                                                                                                                                                                                                                                                                                                                                                                       рЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
Qy
                              멍
                                                        δÃ
                                                                                                                    δÃ
                                                                                                                                                      g
                                                                                                                                                                                 Qy
                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 598; Conserv
    1161
                                1009
                                                             1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201 totottocaaggagtgccogtgcgcagcggagatgccaccttccccaaaggctatggacaa
                                                                                                                         1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                        655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                            952
                                                                                                                                                        892
                                                                                                                                                                                                                   832
                                                                                                                                                                                                                                                                                                                                                                          801
                                                                                                                                                                                                                                                                                                                                                                                                                                      741
                                                                                                                                                                                     981
                                                                                                                                                                                                                                                  921
                                                                                                                                                                                                                                                                                 775
                                                                                                                                                                                                                                                                                                                861
                                                                                                                                                                                                                                                                                                                                           715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgaccaagtggtgcct 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gcctacggttacttggagacacatctctcccaaagcggttggctftgtgagtgaagacga 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tatotocattaatgaagggaacaatattagcotoacotgcatagcaactggtagacoaga 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gacctctagggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcaga 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaa 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAAGTGGCCTGGTTGAACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATCACCGTGAGGCAGGGGGACACGGCCATCCTCAGGTGTGTGGTAGAAGACAACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTTCCCACAGGACTGCCCGTTCGCAGCGTGGAT-----TTTAACCGAGGCACGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACCTCTCAAGTTTACTTGATTGTACAAGTTCCACCAAAGATCTCCCAACATCTCCTCGGA 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGGATGTCTATGATGAAGGATCCTACACATGCTCAGTTCAGACACAGCATGAGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGACCCTCGGGTTGAGCTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAA
                                                                                                            caatgccagcatcatgctatttggtccaggcgcgtcagcgaggtgagcaacggcacgtc 1100
                                                                                                                                                                                                                                                                                                                                                                catttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga
                                                                                                                                                                                                                                                                                                                                                                                                                       caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCACTGTGAATGAGGGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCGCCCTGA
    ttgat 1165
                                CAGTCTGGCCGTACCACTGTGGCTGCTGGCAGCGTCCCTGTTCTGCCTTCTCAGCAAATG
                                                                                                                                                                        tgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacac
                                                                                                                                                                                                                   CAGTGCAAACGGCCTTGAGATTAAGAGCACTGAGGGCCAGTCCTCCCTGACGGTGACCAA
                                                                                                                                                                                                                                               aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttctcaa
                                                                                                                                                                                                                                                                                                   agcetcageagteceetcageagaattecagtggtacaaggatgacaaaagaetgattga
                                                                                                                                                                                                                                                                                                                                                                                                        ATATCTGGAGATCCTAGGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCTGTTATCACCTGGAGACACCTTACACCACTTGGAAGAGAATTTGAAGGAGAAGAAGA
                                                          gaggagggcaggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaatt 1160
                                                                                            CAATGCCAGCCTAGTCCTTTTCAGACCCGGGTCGGTGAG---AGGAATCAACGGATCCAT
                                                                                                                                                        CGTCACTGAGGAACACTACGGCAACTATACCTGTGTGGCTGCCAACAAGCTCGGCGTCAC
                                                                                                                                                                                                                                                                                                                                             CATCACAGAGTCTAAGAGCAATGAAGCCACCACCACGACGACAAGCTTCCCTCAAATGTGA
                                                                                                                                                                                                                                                                                 AGCCTCAGCGGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACACCAG---GATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 343; DB 2; Length 1238; Pred. No. 6.5e-76; O; Mismatches 355; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
                                1068
                                                                                             1008
                                                                                                                                                                                                                       . 891
                                                                                                                                                                                                                                                                                    831
                                                                                                                                                                                                                                                                                                                 920
                                                                                                                                                                                                                                                                                                                                                                             860
                                                                                                                                                                                                                                                                                                                                                                                                            714
                                                                                                                                                                                                                                                                                                                                                                                                                                          800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   354
                                                                                                                                                           951
                                                                                                                                                                                        1040
                                                                                                                                                                                                                                                     980
                                                                                                                                                                                                                                                                                                                                              774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ω,
```

B

1069

TTAAT 1073

```
RESULT 2
US-08-414-657D-7
                                                                                       γQ
                                                                                                                         В
                                                                                                                                                     δõ
                                                                                                                                                                                      В
                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                NAME/KEY: Coding LOCATION: 1...924 OTHER INFORMATION: US-08-414-657D-7
                           20
                                                           В
망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7, patent No. 5
                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 558; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 31-MAR-CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
 219
                               381
                                                            159
                                                                                                                                                        261
                                                                                                                                                                                                        201 tctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaa 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 997 Lenox D: CITY: Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                         99
                                                                                                                                                                                        45
                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                       cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac 320
GACCCACGGGTTGAGCTGGAGAAACGCCATTCTCTGGAATACAGCCTCCGAATCCAGAA
                          ggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaa 440
                                                                                                                                                                                        TCTTCCCACAGGACTGCCTGTTCGCAGCGTGGAT----TTTAACCGAGGCACGGACAA
                                                                                                                         CATCACCGTGAGGCAGGGGGACACAGCCATCCTCAGGTGCGTTCTAGAAGACAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          924 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Levitt,
                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                               Coding Sequence 1...924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diskette
                                                                                                                                                                                                                                                                 20.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7:
                                                                                                                                                                                                                                                    0; Mismatches 314;
                                                                                                                                                                                                                                                                 Score 340.6; DB 2
Pred. No. 2.3e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ψ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Suite
                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           210
                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                       924;
                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                      Gaps
   278
                                                                                                                            158
                                                                                                                                                                                           98
```

```
Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맔
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-08-414-657D-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/08414657D Patent No. 5861283
                                                            ZIP: 08543
COMPUTER READABLE FORM:
COMPUTER: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                     APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1041
                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                               CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          741 caatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaactatccaccata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               921
                                                                                                                                                                                                    ADDRESSEE:
STREET: 99
                                                                                                                                                                    STATE:
APPLICATION NUMBER: US/08/414,657D FILING DATE: 31-MAR-1995
                                               SOFTWARE:
                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gacctctagggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcaga 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tatotocattaatgaagggaacaatattagcotcacotgcatagcaactggtagaccaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACCTCCCAAGTTTACTTGATCGTACAAGTCCCACCAAAGATCTCCAATATCTCCTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAACGAGGTCTCCTCGGCGGATGTCAAACAAGTCAAGGTCACTGTGAACTATCCTCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCTGTTATCACCTGGAGACACCTTACACCAACTGGAAGGGAATTTGAAGGAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTCACTGTGAATGAGGGCAGCAACGTGACTCTGGTCTGCATGGCCAATGGCCGTCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAATGCCAGCCTAGTCCTTTTCAGACCTGGGTCGGTGAGAG 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caatgccagcatcatgctatttggtccaggcgccgtcagcg 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacac 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGTGCCAATGGCCTTGAGATTAAGAGCACGGAGGGCCAGTCTTCCCTGACGGTGACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaa 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  catttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTGGAGATCCTTGGCATCACCAGGGAGCAGTCAGGCAAATATGAGTGCAAAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTCACTGAGGAGCACTACGGCAACTACACCTGTGTGGCTGCCAACAAGCTGGGGGTCAC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCCTCGGCAGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACACTAG---GATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATCACAGAATCCAAGAGCAATGAAGCCACCACAGGACGACAAGCTTCACTCAAATGTGA
                                                                                                                                                                                    Lawrenceville
                                                                                                                                                                    Z,
                                                                                                                                                                                                    SE: Dechert Price & Rhoads
997 Lenox Drive, Building 3, Suite
                                                                                                                                                      USA
                                               FastSEQ for Windows Version
                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          578
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-414-657D-1
                                                                                                Qy
                                                                                                                                                                 Qγ
                                                                                                                                                                                                       В
                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
몽
                            δÃ
                                                                 Db
                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                       460
                                                                                                                                                                                                                                       621
                                                                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                         561
                                                                                                                                                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                                                                                                              441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201 tetettecaaggagtgeeegtgegeageggagatgeeacetteeecaaagetatggacaa 260
640 TATCACAGAATCCAAGAGCAATGAAGCCACCACAGGACGACAAGCTTCACTCAAATGTGA
                   801 catttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga
                                                                                                                                     520
                                                                                                                                                                                                                                                                                                                                           340 GACCTCCCAAGTTTACTTGATCGTACAAGTCCCACCAAAGATCTCCAATATCTCCTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Coding LOCATION: 2...976 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac 320
                                                                                                                                                                                                                                                                                                                                                            gacetetagggtecaceteattgtgcaagtateteceaaaattgtagagatttetteaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggateetegegtggteettetgageaacaceeaaacgeagtacageategagateeagaa 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGGTGGCCTGGTTGAACCGTTCTGGCATCATTTTTGCTGGACATGACAAGTGGTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcct 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATCACCGTGAGGCAGGGGACACAGCCATCCTCAGGTGCGTTCTAGAAGACAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTTCCCACAGGACTGCCTGTTCGCAGCGTGGAT----TTTAACCGAGGCACGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                            GGTGGATGTCTATGATGAGGGTTCCTACACTTGCTCAGTTCAGACACAGCATGAGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACCCACGGGTTGAGCTGGAGAAACGCCATTCTCTGGAATACAGCCTCCGAATCCAGAA
                                                                                   caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccata
                                                                                                                                                     atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctc 740
                                                                                                                                                                                                                         TGTCACTGTGAATGAGGGCAGCAACGTGACTCTGGTCTGCATGGCCAATGGCCGTCCTGA
                                                                                                                                                                                                                                                                                           tatotocattaatgaagggaacaatattagootoacotgcatagcaactggtagaocaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         558;
                                                                CAACGAGGTCTCCTCGGCGGATGTCAAACAAGTCAAGGTCACTGTGAACTATCCTCCCAC
                                                                                                                                   ATATCTGGAGATCCTTGGCATCACCAGGGAGCAGTCAGGCAAATATGAGTGCAAAGCTGC
                                                                                                                                                                                                     ACCTGTTATCACCTGGAGACACCTTACACCAACTGGAAGGGAATTTGAAGGAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             977 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Coding Sequence 2...976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 340.6; DB 2; Pred. No. 2.3e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches 314; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               977;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9.
```

459

519

620 399 560 339 500 279

699 860

639 800 579 Gaps

2;

99

219

```
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΩУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-414-657D-5
                                                                            US-08-414-657D-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5, App
Patent No. 5861
Best Local Similarity
Matches 595; Conserv
                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1041
                                                                                                                       FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           861
                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE:
                                                                                        NAME/KEY: Coding Sequence LOCATION: 1...1014
OTHER INFORMATION:
                                                                                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                NAME: Bloom, Allen REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM:
SOFTWARE: FastSEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                     TYPE: nucleic acic
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                       TELEX:
                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                caatgccagcatcatgctatttggtccaggcgccgtcagcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     agcotcagcagtococtcagcagaattccagtggtacaaggatgacaaaagactgattga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAATGCCAGCCTAGTCCTTTTCAGACCTGGGTCGGTGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTCACTGAGGAGCACTACGGCAACTACACCTGTGTGGCTGCCAACAAGCTGGGGGTCAC 876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGTGCCAATGGCCTTGAGATTAAGAGCACGGAGGGCCAGTCTTCCCTGACGGTGACCAA 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCCTCGGCAGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACACTAG---GATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                       1014 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                     609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Levitt, Pat
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IBM Compatible
                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                       UMBER: US/08/414,657D
31-MAR-1995
                                                                                                                                                                        double
              20.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                      317743-102
Score 340.6; DB 2;
Pred. No. 2.4e-75;
0; Mismatches 354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081
                             Length 1014;
   Indels
   12;
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  980
   w
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                  Дb
                                                                                                δÃ
                                                                                                                                       B
                                                                                                                                                                   δÃ
                                                                                                                                                                                                        Вþ
                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                      QY
                                                                                                                                                                                                                                                                                                                                                                                                             Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                     1101
1014 T 1014
                                 1161 t 1161
                                                                                                                                                                      1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201 tctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaa 260
                                                                  954
                                                                                                                                       897
                                                                                                                                                                                                                                                                         777
                                                                                                                                                                                                                                                                                                          921
                                                                                                                                                                                                                                                                                                                                                                          861
                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                              801 catttcagaagccaagggtacaggtgtccccgtggggcaaaaggggacactgcagtgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATCACCGTGAGGCAGGGGGACACGGCCATCCTCAGGTGTGTGGTAGAAGACAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTTCCCACAGGACTGCCCGTTCGCAGCGTGGAT----TTTAACCGAGGCACGGACAA 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tatotocattaatgaagggaacaatattagootoaootgcatagcaactggtagaccaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACCTCTCAAGTTTACTTGATTGTACAAGTTCCACCAAAGATCTCCCAACATCTCCTCGGA 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gacetetagggteeaceteattgtgeaagtateteeeaaaattgtagagattteeteega
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GETGGATGTCTATGATGAAGGATCCTACACATGCTCAGTTCAGACACAGCATGAGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytgyatytytatgacyagygcccttacacctyctcygtycagacagacaaccaacccaaa 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACCCTCGGGTTGAGCTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAA 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAAGTGGCCTGGTTGAACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cogggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgacaaccgggtcac
                                                                  CAGTCTGGCCGTACCACTGTGGCTGCTGGCAGCGTCCCTGTTCTGCCTTCTCAGCAAATG 1013
                                                                                                                                  CAATGCCAGCCTAGTCCTTTTCAGACCCGGGTCGGTGAG---AGGAATCAACGGATCCAT 953
                                                                                                                                                        caatgccagcatcatgctatttggtccagggggcggtcagcgaggtgagcaacggcacgtc 1100
                                                                                                                                                                                                                        tytototgaacatgactatgggaactacacttgogtggcotcoaacaagctgggcocacac 1040
                                                                                                                                                                                                                                                                                                aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaa 980
                                                                                                                                                                                                                                                                                                                                                               agcetcageagteecetcageagaatteeagtggtacaaggatgacaaaagactgattga 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccata 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTCACTGTGAATGAGGGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCGCCCTGA
                                                                                              gaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctgcttctcaaatt 1160
                                                                                                                                                                                                      CGTCACTGAGGAACACTACGGCAACTATACCTGTGTGTGGCTGCCAACAAGCTCGGCGTCAC 896
                                                                                                                                                                                                                                                                       CAGTGCAAACGGCCTTGAGATTAAGAGCACTGAGGGCCCAGTCCTCCCTGACGGTGACCAA 836
                                                                                                                                                                                                                                                                                                                                        AGCCTCAGCGGTGCCTGCACCTGACTTGAGTGGTACCGGGATGACACCAG---GATAAA 776
                                                                                                                                                                                                                                                                                                                                                                                                         CATCACAGAGTCTAAGAGCAATGAAGCCACCACCACGACGACAAGCTTCCCTCAAATGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTGGAGATCCTAGGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCTGTTATCACCTGGAGACACCTTACACCACTTGGAAGAGAATTTGAAGGAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320
                                                                                                                                                                                                                                                                                                                                                                                                                  719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            239
```

US-08-414-657D-9 ; Sequence 9, Application US/08414657D ; Patent No. 5861283

```
Qy
                                   뮍
                                                               Ωy
                                                                                                 Дb
                                                                                                                                  Qy
                                                                                                                                                                    Дb
                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-414-657D-9
                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity Matches 531; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 861 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Pimenta, Aurea
APPLICANT: Eischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 31-MAR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
   549
                                                                   489
                                                                                                                                    429
                                                                                                                                                                      144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP:
                                     264
                                                                                                    204
                                                                                                                                                                                                       369
                                                                                                                                                                                                                                                                       309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE:
                                                                                                                                                                                                                                         84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Bloom, Allen REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                        24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION
                                                                                                                                                                                                                                                         caaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatga 368
                                                                                                                                                                                                                                                                                                                          agctatggacaacgtgacggtccggcagggggagagcgcaccctcaggtgcactattga 308
gatttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaac 608
                                     GCATGAGCCCAAGACCTCCCCAAGTTTACTTGATCGTACAAGTCCCCACCAAAGATCTCCAA
                                                               caaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtaga 548
                                                                                                                      CAAGTGGTCTCTGGACCCACGGGTTGAGCTGGAGAAACGCCATTCTCTGGAATACAGCCT
                                                                                                                                                                                       caagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcat 428
                                                                                                                                                                                                                                     AGACAAGAACTCAAAGGTGGCCTGGTTGAACCGTTCTGGCATCATTTTTGCTGGACATGA 143
                                                                                                                                                                                                                                                                                                        AGGCACGGACAACATCACCGTGAGGCAGGGGGACACAGCCATCCTCAGGTGCGTTCTAGA 83
                                                                                                    CCGAATCCAGAAGGTGGATGTCTATGATGAGGGTTCCTACACTTGCTCAGTTCAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ľ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Coding Sequence 1...861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOS
                                                                                                                                                                                                                                                                                                                                                                                           20.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9.
                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  317743-102
                                                                                                                                                                                                                                                                                                                                                                           Score 338.6; DB 2
Pred. No. 6.9e-75;
0; Mismatches 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Suite
                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
                                                                                                                                                                                                                                                                                                                                                                               299;
                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                           ω
••
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                      263
                                     323
                                                                                                                                                                       203
                                                                                                                                                                                                                                                                                                                                                                               ۲.
```

```
Ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ŋ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-414-657D-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 6, Application ; Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                    APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Au
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1029 gctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcg 1081
              NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31.1
TELECOMMUNICATION INFORMATION:
                                                                                                                                  FILING DATE: 31-MAR-CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     324 TATCTCCTCGGATGTCACTGTGAATGAGGGCAGCAACGTGACTCTGGTCTGCATGGCCAA 383
                                                                              FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               444 AGGAGAAGAATATCTGGAGATCCTTGGCATCACCAGGGAGCAGTCAGGCAATATGA 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   801 GCTGGGGGTCACCAATGCCAGCCTAGTCCTTTTCAGACCTGGGTCGGTGAGAG 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       969
                                                                                                                                                                                                                                                                                                                                         CITY:
STATE:
                                                                                                                                                                                                                                                                                                                                                        STREET: 997 Lenox or CITY: Lawrenceville
                                                                                                                                                                                                                                                                                                                         COUNTRY:
TELEPHONE:
                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacga 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGCCGTCCTGAACCTGTTATCACCTGGAGACACCTTACACCAACTGGAAGGGAATTTGA 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgt 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACGGTGACCAACGTCACTGAGGAGCACTACGGCAACTACACCTGTGTGGCTGCCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         catcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaa 1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAG----GATAAATAGTGCCAATGGCCTTGAGATTAAGAGCACGGAGGGCCAGTCTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aagactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               actgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATCCTCCCACTATCACAGAATCCAAGAGCAATGAAGCCACCACAGGACGACAAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggac 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGCAAAGCTGCCAACGAGGTCTCCTCGGCGGATGTCAAACAAGTCAAGGTCACTGTGAA 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaa 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTCAAATGTGAGGCCTCGGCAGTGCCTGCACCTGACTTGAGTGGTACCGGGATGACAC
                                                                                                                                                                                                                                                                                                         08543
                                                                                                                                                                                                                                                                                                                                           Z
                                                                                                                                                                                                                                                                                                                                                                           997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fischer, Itzhak
                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pimenta, Aurea
                                                                                                                                                                                                                                                                                                                                                                                               Dechert Price
 609-520-3214
                                                                                                                                                                                                                                                                         Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                 & Rhoads
                                   317743-102
                                                                                                                                                                                                                                                                                                                                                                             ω
                                                                                                                                                                                                                                                                                                                                                                               Suite
                                                                                                                                                                                                                                                                                                                                                                                 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            =
=
=
=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  623
```

```
; NAME/KEY: Coding; LOCATION: 1...912; OTHER INFORMATION: US-08-414-657D-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 912 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            669 gagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    249 agctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattga 308
                                                                        741
                                                                                                                                                                                                                                                624
                                                                                                                                                                                                                                                                                            849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           369 caagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcat 428
                                                                                                                                                                                                   909 aagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaact
                                                                                                                                                                                                                                                                                                                                        564 CTATCCTCCCACTATCACAGAATCCAAGAGCAATGAAGCCACCACAGGACGA/AAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                            504 GTGCAAAGCTGCCAACGAGGTCTCCTCGGCGGATGTCAAACAAGTCAAGGTCACTGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               324 TATCTCCTCGGATGTCACTGTGAATGAGGGCAGCAACGTGACTCTGGTCTGCATGGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     264 GCATGAGCCCAAGACCTCCCAAGTTTACTTGATCGTACAAGTCCCACCAAAGATCTCCAA
                                                                                                                                                                                                                                                                                                                                                                                789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84 AGACAAGAACTCAAAGGTGGCCTGGTTGAACCGTTCTGGCATCATTTTTGCTGGACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24 AGGCACGGACAACATCACCGTGAGGCAGGGGGGACACAGCCATCCTCAGGTGCGTTCTAGA 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      caacogggtcacocgggtggcctggctaaaccgcagcaccatcctctatgctgggaatga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gatttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaac
                                                                     GACGGTGACCAACGTCACTGAGGAGCACTACGGCAACTACACCTGTGTGGCTGCCAACAA
                                                                                             catcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaa 1028
                                                                                                                                                                                                                                                                                                                                                                    ctatccaccatacatttcagaagccaaagggtaccaggtgtccccgtgggacaaaaggggac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGAGAAGAAGAATATCTGGAGATCCTTGGCATCACCAGGGAGCAGTCAGGCAAATATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAGTGGTCTCTGGACCCACGGGTTGAGCTGGAGAAACGCCATTCTCTGGAATACAGCCT
                         gctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcg 1081
                                                                                                                                                         TAG----GATAAATAGTGCCAATGGCCTTGAGATTAAGAGCACGGAGGGCCAGTCTTCCCT
                                                                                                                                                                                                                                                  ACTCAAATGTGAGGCCTCGGCAGTGCCTGCACCTTTGAGTGGTACCGGGATGACAC
                                                                                                                                                                                                                                                                                       actgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaa 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGCCGTCCTGAACCTGTTATCACCTGGAGACACCTTACACCAACTGGAAGGSAATTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               caaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGAATCCAGAAGGTGGATGTCTATGATGAGGGGTTCCTACACTTGCTCAGTTCAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   531;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Coding Sequence 1...912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
20.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 338.6; DB 2;
Pred. No. 7.1e-75;
0; Mismatches 299;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2; Length 912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143
                                                                                                                                                         740
                                                                                                                                                                                                      968
                                                                                                                                                                                                                                                  683
                                                                                                                                                                                                                                                                                                                                                                                                                            563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                           γ
                         Qy
                                                                                                                                                         В
                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                В
                                                                     B
```

γQ 밁

δõ g Дb ΩV 밁 20 B δÃ 밁 Qγ gg δÃ В δÃ Dр ρy В Š DЬ Qγ Дb δÃ В Qγ

2;

Ş

```
US-08-414-657D-8
                                                                                                                                                                                                                                                                                                                                    US-08-414-657D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8, Application Patent No. 5861283
                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 945 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
REGISTRATION NUMBER: 29,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: (CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               801
                   381
                                                  180
                                                                                 321
                                                                                                                120
                                                                                                                                                 261
                                                                                                                                                                                                                  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: >>, --- CITY: Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 31-MAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                 66
                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGGGGGTCACCAATGCCAGCCTAGTCCTTTTCAGACCTGGGTCGGTGAGAG 853
                                                                                                                                                                                                  totottoccaaggagtgocogtgogcagoggagatgccacottccccaaagctatggacaa 260
             ggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaa 440
                                                GAAAGTGGCCTGGTTGAACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCT
                                                                            ccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcct 380
                                                                                                               CATCACCGTGAGGCAGGGGACACGGCCATCCTCAGGTGTGGTAGAAGACAAGAACTC
                                                                                                                                  cgtgacggtccggcagggggagagcgcccccctcaggtgcactattgacaaccgggtcac 320
                                                                                                                                                                               TCTTCCCACAGGACTGCCCGTTCGCAGCGTGGAT-----TTTAACCGAGGCACGGACAA 119
                                                                                                                                                                                                                                               556;
08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ľ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Levitt, Pat
                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                double
                                                                                                                                                                                                                                                                 19.9%;
63.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    317743-102
                                                                                                                                                                                                                                                                 Score 337.4; DB 2; Pred. No. 1.4e-74;
                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ū
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.0
316;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         210
                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                    945;
                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                   Gaps
                                                                                                                  179
                                                    239
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                      US-08-414-657D-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                     Sequence 10, Application Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
               CURRENT APPLICATION DATA:
                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                   APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1041 caatgccagcatcatgctatttggtccaggcgccgtcagcg 1081
                                                                                                                                                                                                                                                  TITLE OF INVENTION: Limbic System-A: TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                741 caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             681 atacttggaaattcagggcatcacccgggagccagtcagggggactacgagtgcagtgcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                          OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
APPLICATION NUMBER:
                                                                COMPUTER:
                                                                                                                                  COUNTRY:
                                                                                                                                                                                 STREET:
                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tatotocattaatgaagggaacaatattagcotcacctgcatagcaactggtagaccaga 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gacetetagggteeaceteattgtgeaagtateteeeaaaattgtagagatttetteaga 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 catttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTGGAGATCCTAGGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTGTTATCACCTGGAGACACCTTACACCACTTGGAAGAGAATTTGAAGGAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCACTGTGAATGAGGGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCGCCCCTGA 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACCTCTCAAGTTTACTTGATTGTACAAGTTCCACCAAAGATCTCCAACATCTCCTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTGGATGTCTATGATGAAGGATCCTACACATGCTCAGTTCAGACACAGCATGAGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACCCTCGGGTTGAGCTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAA 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tytototgaacatgactatgggaactacacttgcgtggcotocaacaagctgggccacac 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agootcagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCACAGAGTCTAAGAGCAATGAAGCCACCACAGGACGACAAGCTTCCCTCAAATGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAATGCCAGCCTAGTCCTTTTCAGACCCGGGTCGGTGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTGCAAACGGCCTTGAGATTAAGAGCACTGAGGGCCAGTCCTCCCTGACGGTGACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttctaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTCACTGAGGAACACTACGGCAACTATACCTGTGTGGCTGCCAACAAGCTCGGCGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCCTCAGCGGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACACCAG---GATAAA
                                                                                                                   08543
                                                                                                                                                                  Lawrenceville
                                                                                                                                                  Z
                                                                                                                                                                                E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                    Levitt, Pat
                                                              IBM Compatible
                                                                                                                                                                                                                                                                  Limbic System-Associated
                                                                                                                                                                                                                                                                                                                                                                                       US/08414657D
                                                                                                                                                                                                                                      60
US/08/414,657D
                                                                                                                                                                                   ω
                                                                                                                                                                                       Suite
                                                                                                                                                                                                                                                                       Membrane
                                                                                                                                                                                       210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           836
```

```
B
                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LOCATION: 1...861
; OTHER INFORMATION:
US-08-414-657D-10
                              γ
                                                                   밁
                                                                                                   δÃ
                                                                                                                                      밁
                                                                                                                                                                      20
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                         QΥ
 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 19.7%;
Best Local Similarity 63.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
REGISTRATION NUMBER: 29,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 31-MAR-CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          249 agctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattga 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                          489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   309
624
                                                                                                                                                                                                           444
                                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                                                                                                        264
                                                                   564
                                                                                                     789
                                                                                                                                         504
                                                                                                                                                                        729
                                                                                                                                                                                                                                               669
                                                                                                                                                                                                                                                                                384
                                                                                                                                                                                                                                                                                                                  609
                                                                                                                                                                                                                                                                                                                                                                                     549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
                  actgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  caagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcat 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              caaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatga 368
                                                                                                                                                           gtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaa
                                                                                                                                                                                                                                                                                                           tggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgt 668
                                                                                                                                                                                                                                                                                                                                                   CATCTCCTCGGATGTCACTGTGAATGAGGGCAGCAATGTAACCCTGGTCTGCATGGCCAA
                                                                                                                                                                                                                                                                                                                                                                              gatttetteagatatetecattaatgaagggaacaatattagceteacetgcatagcaac 608
                                                                                                                                                                                                                                                                                                                                                                                                                        GCATGAGCCCAAGACCTCTCAAGTTTACTTGATTGTACAAGTTCCACCAAAGATCTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                          caaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtaga 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAGTGGTCTCTGGACCCTCGGGTTGAGCTGGAGAAACGCCATGCTCTGGAATACAGCCT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGACAAGAACTCGAAAGTGGCCTGGTTGAACCGCTCTGGCATCATCTTCGCTGGACACGA 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGCACGGACAACATCACCGTGAGGCAGGGGGACACGGCCATCCTCAGGTGTGGTAGA
CCTCAAATGTGAAGCCTCAGCGGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACAC
                                                                                                                                                                                                           AGGAGAAGAAGAATATCTGGAGATCCTAGGCATCACCAGGGAACAGTCAGGCAAATATGA
                                                                                                                                                                                                                             gagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacga
                                                                                                                                                                                                                                                                                TGGGCGCCCTGAACCTGTTATCACCTGGAGACACCTTACACCACTTGGAAGAGAATTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCGAATCCAGAAGGTGGATGTCTATGATGAAGGATCCTACACATGCTCAGTTCAGACACA 263
                                                                                                ctatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggac
                                                                                                                                        GTGCAAGGCTGCCAACGAGGTCTCCTCCGCGGATGTCAAACAAGTCAAGGTCACTGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           528;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 861 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Coding
1...861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 333.8; DB 2
Pred. No. 1.1e-73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches 302;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 861;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ω
```

Gaps

μ,

83

908

623

683

848 563 788 503 728 443 383

```
DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
US-08-414-657D-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Дb
                                                                                                                                                       ; LOCATION: 1...756
; OTHER INFORMATION:
US-08-414-657D-17
D
                               δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17,
                                                                                      Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                     Matches 481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1029
                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     741 GACGGTGACCAACGTCACTGAGGAACACTACGGCAACTATACCTGTGTGGCTGCCAACAA
                  277 ggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggcta 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                                                                             NAME/KEY: Coding Sequence LOCATION: 1...756
                                                                                                                                                                                                                                               TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                     TYPE:
                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                            TELEX
                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gctgggccacaccaatgccagcatcatgctatttggtccagggcgccgtcagcg 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     catcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaa 1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAG---GATAAACAGTGCAAACGGCCTTGAGATTAAGAGCACTGAGGGCCAGTCCTCCCT 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aagactgattgaaggaaagaaggggtgaaaagtggaaaacagacctttcctctcaaaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTCGGCGTCACCAATGCCAGCCTAGTCCTTTTCAGACCCGGGTCGGTGAGAG 853
GGGGACACAGCCATCCTCAGGTGCGTTCTAGAAGACAAGAACTCAAAGGTGGCCTGGTTG 60
                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lawrenceville
                                                                                                                                                                                                                                                                                 nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pimenta, Aurea
Fischer, Itzhak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Levitt, Pat
                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAR-1995
                                                                                                                                                                                                                                                                    double
                                                                                    17.9%;
63.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/414,657D
                                                                     0;
                                                                                      Score 303.6; DB 2; Pred. No. 3.1e-66;
                                                                                                                                                                                                                                                                                                                                                                                                                                   317743-102
                                                                     Mismatches 274;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3, Suite
                                                                                                   Length 756;
                                                               Indels 🖔 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   968
                                                                     <u>ب.</u>
```

```
QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S<sub>2</sub>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                             US-08-414-657D-18
                                                                                                                                                                                                                                                                                                                                            Sequence 18, Appli
Patent No. 5861283
                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building
                                                                                                                                                                                                             APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-A:
TITLE OF INVENTION: Protein and DNA
                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           397
                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     997 tatgggaactacacttgcgtggcctccaacaagctggg 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 TIGATCGTACAAGTCCCACCAAAGATCTCCAATATCTCCTCGGATGTCACTGTGAATGAG 300
                                                                   COUNTRY: US
ZIP: 08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                   718 TACGGCAACTACACCTGTGTGGCTGCCAACAAGCTGGG 755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          757
                                                                                                        STATE:
                                                                                                                       CITY: Lawrenceville
OPERATING SYSTEM:
                  COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCACCTGACTTTGAGTGGTACCGGGATGACACTAG---GATAAATAGTGCCAATGGCCTT 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cccgtggtacggaggtaaaggtcaccgtgaactatccaccatacatttcagaagccaag 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCATCACCAGGGAGCAGTCAGGCAAATATGAGTGCAAAGCTGCCAACGAGGTCTCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgcg 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agacacatctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcag 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAGCAACGTGACTCTGGTCTGCATGGCCCAATGGCCGTCCTGAACCTGTTATCACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgg 636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaa 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGGGTTCCTACACTTGCTCAGTTCAGACACAGCATGAGCCCAAGACCTCCCAAGTTTAC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGAGAAACGCCATTCTCTGGAATACAGCCTCCGAATCCAGAAGGTGGATGTCTATGAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgac 456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACCGTTCTGGCATCATTTTTGCTGGACATGACAAGTGGTCTCTGGACCCCACGGGTTGAG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtc 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGGATGTCAAACAAGTCAAGGTCACTGTGAACTATCCTCCCACTATCACAGAATCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGACACCTTACACCAACTGGAAGGGAATTTGAAGGAGAAGAAGAATATCTGGAGATCCTT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgac 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGATTAAGAGCACGGAGGGCCAGTCTTCCCTGACGGTGACCAACGTCACTGAGGAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCAATGAAGCCACCACAGGACGACAAGCTTCACTCAAATGTGAGGCCTCGGCAGTGCCT 600
                                                                                                        Z
                                                                                                                                                                                                                                                                                                                                                             Application US/08414657D
                                                                                                                                                                                                                              Zhukareva, Victoria
VENTION: Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                 Pimenta, Aurea
Fischer, Itzhak
                                                                                       USA
                                                                                                                                                                                                                                                                                                        Levitt,
                  IBM Compatible
                               Diskette
   DOS
                                                                                                                                                                                                60
                                                                                                                                            ω
                                                                                                                                             Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
```

```
Qγ
                                                                                                                                     망
                                                                                                                                                                    Qy
                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                             γ
                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    δδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-414-657D-18
                             δÃ
                                                               밁
                                                                                              Š
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity Matches 478; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 756 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 337
541
                                                                   481
                                                                                                    757
                                                                                                                                       421
                                                                                                                                                                        697
                                                                                                                                                                                                          361
                                                                                                                                                                                                                                           637
                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                               577
                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                  517
                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                        457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Bloom, Allen REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ggggagagegecaccetcaggtgeactattgacaaccgggtcacccegggtggcctggcta 336
AGCAATGAAGCCACCACAGGACGACAAGCTTCCCTCAAATGTGAAGCCTCAGCGGTGCCT 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAAGGTGGATGTCTATGAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgac 456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtc 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGGACACGGCCATCCTCAGGTGTGTGGTAGAAGACAAGAACTCGAAAGTGGCCTGGTTG
                                                                                    cccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaag
                                                                                                                                                                                                                                       agacacatctctcccaaaagcggttggctttgtgagtgaagacgaatacttggaaattcag 696
                                                                                                                                                                                                                                                                              GGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCCCCTGAACCTGTTATCACCTGG
                                                                                                                                                                                                                                                                                                gggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgg 636
                                                                                                                                                                                                                                                                                                                                                 TTGATTGTACAAGTTCCACCAAAGATCTCCAACATCTCCTCGGATGTCACTGTGAATGAG
                                                                                                                                                                                                                                                                                                                                                                               ctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaa 576
                                                                                                                                                                                                                                                                                                                                                                                                                       GAAGGATCCTACACATGCTCAGTTCAGACACAGCATGAGCCCAAGACCTCTCAAGTTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCTGGACCCTCGGGTTGAG 120
                           ggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccc
                                                              GGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGCCAACGAGGTCTCCTCC
                                                                                                                                                                      ggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                  gagggcccttacacctgctcggtgcagacagacaaccacccaaagacctctagggtccac 516
                                                                                                                                                                                                          AGACACCTTACACCACTTGGAAGAAATTTGAAGGAGAAGAAGAATATCTGGAGATCCTA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Coding Sequence
1...756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 298.2; DB 2;
Pred. No. 6.8e-65;
0; Mismatches 278;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 756;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ς.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                876
                                                                   540
                                                                                                    816
                                                                                                                                       480
                                                                                                                                                                         756
                                                                                                                                                                                                                                                                                360
```

H

```
US-08-414-657D-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta \Lambda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
망
                           δÃ.
                                                                                                                                               US-08-414-657D-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 11,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                            Query Match
Best Local Similarity
                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Au
APPLICANT: Fischer, It
                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 31-MAR-CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         877
                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601 GCACCTGACTTTGAGTGGTACCGGGATGACACCAG---GATAAACAGTGCAAACGGCCTT 657
                               277
                                                                                                                                                             LOCATION: 1...219
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Bloom, Allen REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM COMPONENTING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Dechert Price & Rhoads STREET: 997 Lenox Drive, Building
                                                                                                                                                                                               NAME/KEY:
                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                 TYPE:
                                                                                                                                                                                                                                                                                                                               TELEX:
                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                               LENGTH:
1 GGGGACACAGCCATCCTCAGGTGCGTTCTAGAAGACAAGAACTCAAAGGTGGCCTGGTTG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tatgggaactacacttgcgtggcctccaaccaagctgggc 1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgac 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggcta 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACGGCAACTATACCTGTGTGGCTGCCAACAAGCTCGGC 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGATTAAGAGCACTGAGGGCCAGTCCTCCCTGACGGTGACCGACGTCACTGAGGAACAC 717
                                                               142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08543
                                                                                                                                                                                                                                              nucleic acid
DEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/08414657D
                                                                                                                                                                                                                                                                             219 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pimenta, Aurea
Fischer, Itzhak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FastSEQ for Windows Version
                                                                                                                                                                                                                                linear
                                                                                                                                                                                              Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAR-1995
                                                                             5.9%;
67.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                  29,135
                                                                                                                                                                                                                                                                                                                 11:
                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                    317743-102
                                                                             Score 100; DB 2;
Pred. No. 5.9e-16;
                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.0
                                                                                             Length 219
                                                                 Indels
                                                               0,
                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           936
                                                                 0
```

```
Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       D
 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-414-657D-12
                              Š
                                                                                                                                                          US-08-414-657D-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 12, Application US/08414657D Patent No. 5861283
                                                                       Matches 139;
                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Eischer, Itzhak
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 CTGGAGAAACGCCATTCTCTGGAATACAGCCTCCGAATCCAGAAGGTGGATGTCTATGAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  337 aaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtc 396
                                    277
                                                                                                                                                                     NAME/KEY: Coding Sequence LOCATION: 1...219
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 31-MAF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 997 Lenox Dr
CITY: Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME:
                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGGGTTCCTACACTTGCTCAGTTCAGACACA 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gagggcccttacacctgctcggtgcagacaga 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACCGTTCTGGCATCATTTTTGCTGGACATGACAAGTGGTCTCTGGACCCACGGGTTGAG 120
                  ggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggcta 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cttctgagcaacaccccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgac 456
GGGGACACGCCATCCTCAGGTGTGTGGTAGAAGACAAGAACTCGAAAGTGGCCTGGTTG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08543
                                                                                                                                                                                                                                                                               nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Dechert Price & Rhoads
997 Lenox Drive, Building 3, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                     Conservative
                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAR-1995
                                                                                                                                                                                                                                                                 double
                                                                                  5.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/414,657D
                                                                   Score 95.2; DB 2;
Pred. No. 9.1e-15;
0; Mismatches 73;
                                                                                                                                                                                                                                                                                                                                                                                                                           317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             210
                                                                                                      Length 219;
                                                                     Indels
                                                                     0;
                                                                     Gaps
                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                δÃ
```

```
RESULT 13
US-08-414-657D-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VQ
V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 13, Application US/08414657D
; Patent No. 5861283
                                                                                         US-08-414-657D-13
Query Match
Best Local Similarity
Matches 115; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhai
APPLICANT: Zhukareva, Vic
                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 177 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION: NAME: Bloom, Allen
                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 99/ LC...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE:
                                                                                                        NAME/KEY: Coding LOCATION: 1...177 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM CON OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                        NAME: Bloom, Allen REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                    TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAAGGTGGATGTCTATGAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGGATCCTACACATGCTCAGTTCAGACACA 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gagggcccttacacctgctcggtgcagacaga 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgac 456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCTGGACCCTCGGGTTGAG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtc 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ľ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: Dechert Price & Rhoads
997 Lenox Drive, Building 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                Coding Sequence 1...177
                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-1995
                                                                                                                                                                                                          double
               4.6%;
                                                                                                                                                                                                                                                                                   ند
Score 77.8; DB 2;
Pred. No. 1.7e-10;
0; Mismatches 62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Suite
                                 Length 177;
```

577 gggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgg 636

Conservative

0;

Indels

0;

Gaps

0;

1 GGCAGCAACGTGACTCTGGTCTGCATGGCCAATGGCCGTCCTGAACCTGTTATCACCTGG 60

```
γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
US-08-414-657D-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                          Qy
                                                           Db
                                                                                       Qy
DЬ
                                                                                                                                                                                                     US-08-414-657D-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 14, Application US/08414657D Patent No. 5861283
                                                                                                                          Matches 115;
                                                                                                                                        Query Match 4.6%;
Best Local Similarity 65.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 31-MAR-1
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA: APPLICATION NUMBER: US,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             697 ggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggcc 753
                               637
                                                                               577 gggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP:
                                                                                                                                                                                                                      LOCATION: 1...177
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE:
                                                                                                                                                                                                                                                                                                                              LENGTH:
                            agacacateteteecaaageggttggetttgtgagtgaagaegaataettggaaatteag 696
                                                             GGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCGCCCTGAACCTGTTATCACCTGG
 AGACACCTTACACCACTTGGAAGAGAATTTGAAGGAGAAGAAGAATATCTGGAGATCCTA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lawrenceville
                                                                                                                                                                                                                                                                                                                 nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bloom,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Dechert Price & Rhoads
997 Lenox Drive, Building 3,
                                                                                                                                                                                                                                                                                                                              177 base pairs
                                                                                                                                                                                                                                                                                                                                                                                              609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                          Conservative
                                                                                                                                                                                                                                        Coding Sequence 1...177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAR-1995
                                                                                                                                                                                                                                                                                                   double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                        29,135
                                                                                                                                                                                                                                                                                                                                                                14:
                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                              317743-102
                                                                                                                                          Pred. No. 1.7e-10;
                                                                                                                                                         Score 77.8;
                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Suite 210
                                                                                                                                                         DB 2;
                                                                                                                           62;
                                                                                                                                                         Length 177;
                                                                                                                           Indels
                                                                                                                          0;
                                                                                                                          Gaps
                                                                                            636
                                                              60
                                                                                                                          0;
```

```
US-08-414-657D-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                        QΥ
                                                                                                                                            망
                                                                                                                                                                                                                                                                                                        ; LOCATION: 1...198; ; OTHER INFORMATION: US-08-414-657D-15
                                ΩV
                                                                        밁
                                                                                                                                                                                Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Patent No.
 Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15,
                                                                                                                                                                                                                      Matches 123;
                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Limbic System-A-TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 GGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGCCAACGAGGTCTCC 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         697 ggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggcc
                          955 ttcctctcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgc 1014
                                                                                             895 tacaaggatgacaaaagactgattgaaggaaaggaggtggaaagtggaaaacagacct 954
                                                                                                                                                               835 gyacaaaaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattcccagtgg 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 997 Lenox L. CITY: Lawrenceville
118 GGCCAGTCTTCCCTGACGGTGACCAACGTCACTGAGGAGCACTACGGCAACTACACCTGT 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                        61
                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                                                                                            1 GGACGACAAGCTTCACTCAAATGTGAGGCCTCGGCAGTGCCTGCACCTGACTTTGAGTGG 60
                                                                      TACCGGGATGACACTAG---GATAAATAGTGCCAATGGCCTTGAGATTAAGAGCACGGAG 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                      198 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                     Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Diskette
                                                                                                                                                                                                                                       3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       317743-102
                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                       Score 65.6; DB 2; Pred. No. 1.9e-07;
                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Suite
                                                                                                                                                                                                                                                            Length 198;
                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                          ς.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              753
                                                                                                                                                                                                                        Gaps
```

Qy ΟĎ 1015 gtggcctccaacaagctggg 1034 ||||| ||||||||||||| 178 GTGGCTGCCAACAAGCTGGG 197

Search completed: July 11, 2002, 22:53:32 Job time: 13221 sec

Searched:

Database

Sequence:

Run on: OM nucleic -

Sequence Sequence Sequence Sequence

Sequence Sequence

Sequence Sequence

Sequence

Sequence

Sequence Sequence Sequence Sequence

Sequence Sequence

Sequence

```
Minimum DB seq length: Maximum DB seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                            Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                 d. No. is the number of results predicted by chance to have a re greater than or equal to the score of the result being printed, is derived by analysis of the total score distribution.
 nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                            length: 2000000000
                                                                                                                                                                                                                                                                                                  Match
 Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-700-397-1
1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               July 11, 2002, 21:28:17; Search time 418.18 Seconds (without alignments) 4155.153 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1156321 segs, 841861299 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atgaaaaccatccagccaaa.....tgcacctgcttctcaaattt 1032
                 00000000000000000000
                                                                                                                                                                                                                           Length
 DB
US-09-978-403A-522

US-09-978-681A-522

US-09-978-681A-522

US-09-978-75A-522

US-09-998-31A-522

US-09-998-423A-522

US-09-998-423A-522

US-09-978-375A-522

US-10-013-929A-522

US-10-013-929A-522

US-10-013-929A-522

US-10-017-082A-522

US-10-121-043-375

US-10-121-043-375

US-10-121-043-375

US-10-121-044-375

US-10-121-056-375

US-10-121-056-375

US-10-121-058-375

US-10-121-058-375

US-10-121-058-375

US-10-121-058-375

US-10-121-058-375
                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                        Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                           Description
      Sequence
Sequence
Sequence
Sequence
                                        Sequence
Sequence
Sequence
Sequence
                                                                                Sequence
Sequence
Sequence
Sequence
                                                                                                                 Sequence
Sequence
Sequence
                                                                                                                                                                                 Sequence
Sequence
 Sequence
                                                                                                                                                                          Sequence
                                                                                                                                                                                                          Sequence
 522,
RESULT 1
US-09-978-403A-522
                                       CURRENT APPLICATION NUMBER: US/09/978,403A
CURRENT FILING DATE: 2002-03-19
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/064311
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                             Sequence 522, Application US/09978403A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                      APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P.63001C17
                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/077632
       FILING DATE: 1998-03-10
               APPLICATION NUMBER: 60/066364 FILING DATE: 1997-11-21 APPLICATION NUMBER: 60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                 Gerritsen, Mary E. Goddard, Audrey Godowski, Paul J.
                                                                                                                                                                                                                                           Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                    Filvaroff, Ellen
                                                                                                                                                                                                                                                           Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                           Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                          Fong,
                                                                                                                                                                                                                                                                                                                                     Eaton, Dan
                                                                                                                                                                                                                                                                                                                                            Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                    Botstein, David
                                                                                                                                                                                                   Paoni,
                                                                                                                                                                                                                          Kuo, Sophia S.
                                                                                                                                                                                                                                  Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                 Napier, Mary A.
                                                                                                                                                                                                           James;
                                                                                                                                                                                                                                                                                                    Wei-Qiang
                                                                                                                                                                                                                                                                                                            Sherman
                                                                                                                                                                                                  Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Napoleon
                                                                                                                                                                                                                                                                                                                                                             ָּט
                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-123-108-375
US-10-123-154-375
US-10-123-15-375
US-10-123-15-375
US-10-123-212-375
US-10-123-213-375
US-10-121-041-375
US-10-121-046-375
US-10-121-046-375
US-10-121-048-375
US-10-121-048-375
US-10-121-048-375
US-10-121-051-375
US-10-121-052-375
US-10-121-052-375
US-10-121-052-375
US-10-121-052-375
US-10-121-052-375
US-10-121-052-375
US-10-121-052-375
US-10-121-052-375
US-10-121-052-375
                                                                                                                                                                                                                                                                                                                                                                                                                              ALIGNMENTS
```

Result No.

PRIOR APPLICATION NUMBER: 60/081195 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081203 FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/080328
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080334 APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081838 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-15 FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/081955 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-08 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080165 FILING DATE: 1998-03-31 FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079920 APPLICATION NUMBER: 60/079663 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/ FILING DATE: 1998-03-25 APPLICATION NUMBER: 60/078939 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078910 APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078936 APPLICATION NUMBER: 60/078004 FILING DATE: 1998-03-13 FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077641
FILING DATE: 1998-03-11 FILING APPLICATION NUMBER: FILING DATE: 1998-04 APPLICATION NUMBER: 60/081229 APPLICATION NUMBER: 60/080105 FILING DATE: 1998-03-31 FILING DATE: 1998-03-26 APPLICATION NUMBER: 60/079664 APPLICATION NUMBER: 60/079656 FILING DATE: 1998-03-20 FILING DATE: 1998-03-APPLICATION NUMBER: APPLICATION NUMBER: 60 FILING DATE: 1998-03-1 DATE: NUMBER: 60/081838 1998-04-15 1998-04-15 60/081819 60/081071 60/080327 60/079294 60/077791 60/077649 60/081817 60/081049 60/081070

PRIOR FILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-06 PRIOR APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084639 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083742 FILING DATE: 1998-04-30 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083554 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083558 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/ APPLICATION NUMBER: FILING DATE: 1998-0. APPLICATION NUMBER: FILING DATE: 1998-04-21 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-22 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15 FILING DATE: 1998-0: APPLICATION NUMBER: FILING DATE: APPLICATION N APPLICATION NUMBER: 60/ FILING DATE: 1998-05-07 APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: 1998-0: APPLICATION NUMBER: APPLICATION NUMBER: 60/084441 FILING DATE: 1998-05-06 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-29 APPLICATION N FILING DATE: APPLICATION NUMBER: 60/1 FILING DATE: 1998-04-23 FILING DATE:
APPLICATION N APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60, FILING DATE: 1998-04-2 FILING DATE: APPLICATION | FILING DATE: FILING DATE: APPLICATION APPLICATION NUMBER: 6 FILING DATE: 1998-05-FILING DATE: APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29 FILING DATE: 1998-04-28 APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION APPLICATION NUMBER: NUMBER: 60 NUMBER: NUMBER: NUMBER: NUMBER: 1998-05-07 1998-05-15 1998-05-15 1998-05-13 1998-05-13 1998-05-1998-05-07 1998-05-07 1998-04-22 1998-04-22 1998-05-60/085700 60/085582 60/085323 60/085338 60/085339 60/084643 60/084600 60/084598 60/084640 60/084414 60/084366 60/083559 60/083545 60/083499 60/083496 60/083495 60/083392 60/083322 60/083336 60/082796 60/082797 60/082700 60/082804 60/082704 60/082569 60/082568 60/085689 60/084627 60/084639

NUMBER:

60/085580

```
ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Βþ
                            밁
                                                         δÃ
                                                                                         밁
                                                                                                                   Qy
                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                  δð.
                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                               γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                β
                                                                                                                                                  맑
                                                                                                                                                                                 δÃ
                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                                                                                                                                                                                                                                                                       674
                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                    614
                                                                                                                                                                                                                                                                                                                                                                                                                                                               554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
 901
                                                                                         914
                                                                                                                       781
                                                                                                                                                      854
                                                                                                                                                                                  721
                                                                                                                                                                                                                  794
                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                            734
                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-05-18
APPLICATION NUMBER: 60/085573
TITING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085704
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atttcttcagatatctccattaatgaagggaaccaatattagcctcacctgcatagcaact 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gctatggacaacgtgacggtccggcaggggggggggcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                         agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                    ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                              atettetteaatgtetetgaaeatgaetatgggaaetaeacttgegtggeeteeaaeaag
                                            atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                               tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                            tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                       agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                       agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                    ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                       agactgattgaaggaaaggaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                      ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                            tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                  ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                              tatocaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
ilarity 100.0%;
Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1032; DB 5;
Pred. No. 6.3e-290;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
                               1033
                                                                                                                                                                                                                                                                                                                                                                                                     673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                    853
                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                    540
   960
                                                                                            973
                                                                                                                         840
                                                                                                                                                      913
                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                               793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
```

```
RESULT 2
US-09-978-544A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 522,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/978,544A
CURRENT FILING DATE: 2002-03-19
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Secreta TITLE OF INVENTION: Acids FILE REFERENCE: P2630P1C13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                               PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
PRIOR
PRIOR
                                    PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                            PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1154 cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1034
                                                                                                                                                                                                         FILING DATE: 1997-11-03
APPLICATION NUMBER: 60/065311
FILING DATE: 1997-11-13
APPLICATION NUMBER: 60/066364
                                                                                                                                                                               FILING DATE: 1997-11 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
APPLICATION |
                        APPLICATION NUMBER: 60/078886
                                     FILING DATE:
                                                  APPLICATION NUMBER:
                                                              APPLICATION NUMBER: 60/0
FILING DATE: 1998-03-12
                                                                                       APPLICATION NUMBER: 60/077649 FILING DATE: 1998-03-11
                                                                                                                  FILING DATE: 1998-03-11
                                                                                                                             APPLICATION NUMBER:
                                                                                                                                         APPLICATION NUMBER: 60/
FILING DATE: 1998-03-11
                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T: Williams, P. Mickey
T: Wood, William I.
INVENTION: Secreted and Transmembrane Polypeptides and Nucleic INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ashkenazi, Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                    Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                           Shelton, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gurney,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Grimaldi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gerritsen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09978544A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          avin, Ivar J.
, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sherman
 NUMBER:
                                                                                                                                                                      1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nicholas
                                                                                                                                                                                              1997-11-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1032
             1998-03-20
                                       1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                               Timothy A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ellen
                                                                             60/077791
 60/078936
                                                   60/078004
                                                                                                                             60/077641
                                                                                                                                                        60/077632
                                                                                                                                                                                  60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ľ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1093
```

1998-03-20

PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079689
PRIOR FILING DATE: 1998-03-27
PRIOR PILING DATE: 1998-03-27
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079728
PRIOR APPLICATION NUMBER: 60/079728
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079786 PRIOR OR FILING DATE: 1998-04-09
R APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/08 R APPLICATION NUMBER: 60 R FILING DATE: 1998-03-2 R APPLICATION NUMBER: 60 R FILING DATE: 1998-03-2 FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/080105
FILING DATE: 1998-03-31
FILING DATE: 1998-03-31 FILING DATE: 1990 - 60
APPLICATION NUMBER: 60 APPLICATION NUMBER: 60
FILING DATE: 1998-03-03
APPLICATION NUMBER: 60 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-21 APPLICATION NUMBER: 60/0 APPLICATION NUMBER: 60/081070 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081049 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/080333 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080334 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080165 APPLICATION NUMBER: 60/079656 FILING DATE: 1998-03-26 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: 60/i FILING DATE: 1998-04-22 APPLICATION P APPLICATION NUMBER: 60/ FILING DATE: 1998-04-08 APPLICATION NUMBER: APPLICATION NUMBER: 60/080194 APPLICATION FILING DATE: FILING DATE: APPLICATION 1 APPLICATION FILING DATE: 1998-04-21 FILING DATE: APPLICATION | APPLICATION FILING DATE: FILING DATE: 1998-04 APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: 1998-04-08 FILING DATE: FILING DATE: NUMBER: NUMBER: NUMBER: NUMBER: NUMBER: 60/081819 1998-04-09 1998-04-01 1998-03-1998-03-1998-03-1998-04-15 1998-04-1998-04-15 1998-04-22 60/079786 3-27 60/079664 60/079294 60/078910 60/082797 60/082700 60/082804 60/082704 60/082569 60/082568 60/081838 60/081952 60/081817 60/081955 60/081229 60/081203 60/081195 60/081071 60/080328 60/080327 60/079920 60/078939

```
PRIOR FILING DATE: 1998-04-27
PRIOR APPLICATION NUMBER: 60/083496
PRIOR APPLICATION TUMBER: 60/083496
PRIOR APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/083499
PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING PRIOR APPLICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
OR APPLICATION NUMBER: 60/085579
OR FILING DATE: 1998-05-15
OR FILING DATE: 1998-05-15
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085573
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085704
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085697
OR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084637
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084639
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084640
                                                                                                                                                                                                                                                                                                                                      DR APPLICATION NUMBER: 60/084643
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/085339
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085338
OR FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                           FILING DATE: 1998-05
APPLICATION NUMBER:
                                                                                                                                                                                                                                              FILING DATE: APPLICATION N
                                                                                                                                                                                                                                                                                   FILING DATE:
APPLICATION N
                                                                                                                                                                                                                                                                                                                        APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/084414
FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/083545
                                                                                                                                                                                        FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATE:
                                                                                                                                                                                                                                                NUMBER:
                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                                                                                      NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-23
                                                                                                                                                                                                                               1998-05-3
                                                                                                                                                                                                                                                                1998-05-1
                                                                                                                                                                                                                                                                                                       1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083392
                                                                                                                                                                                                           60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083336
                                                                                                                                                                                                                                                60/085700
                                                                                                                                                                                                                                                                                                                        60/085323
                                                                                                                                                                                                                                                                                     60/085582
```

Query Match Best Local Similarity Matches 1032; Conserv 100.0%; ilarity 100.0%; Conservative 0 0; Score 1032; DB 5; Pred. No. 6.3e-290; ; Mismatches 0; Length 1679; Indels 0;

Gaps

0;

Ş

g

Db Q Дb Qy B Qy

B Qy 뮍 δÃ В γQ

```
1154
                        1021
                                                  1094
                                                                                                      1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134
                                                                            961
                                                                                                                                901
                                                                                                                                                        974
                                                                                                                                                                                  841
                                                                                                                                                                                                            914
                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                               854
                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                 794
                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                    734
                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                        674
                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gctgctctgtgtctcttcccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                       accacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gagatccagaacgtggatgtgtatgacgagggcccttacaccctgctcggtg@agacagac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag,acagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcacacagcatc
                                                                                                                                                                                                                                                                                                                                                                                 tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
cttctcaaattt
                        cttctcaaattt
                                                  aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                             aacggcacgtcgaggagggcaggctgcgtctggctgcttgcctcttctggtcttgcacctt
                                                                                                     ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                  ctgggccacacccaatgccagcatcatgctatttggtccaggggcgtcagcgaggtgagc
                                                                                                                                                        atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                     atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                             ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                           ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                 tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                              tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                  tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                      agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                    agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                         1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                            1020
                                                                                                      1093
                                                                                                                                                           1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                 960
                                                                                                                                                                                                            973
                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                913
                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                   853
                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                     793
                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                        733
                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    433
```

Ş g Qy g

20 Db Qγ B Q 멍 Qy 밁 Qy Db δÃ B Qy g Qγ B δÃ

```
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C18
CURRENT APPLICATION NUMBER: US/09/978,681A
CURRENT FILING DATE: 2002-03-19
PRIOR APPLICATION NUMBER: 09/918585
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 1097-10-17
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/064249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
US-09-978-681A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 522, Applic GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Ashkenazi, APPLICANT: Baker Kevi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/077649
FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077791
FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/065311 FILING DATE: 1997-11-13
                                                                    APPLICATION FILING DATE:
                                                                                                  FILING DATE:
                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                    APPLICATION NUMBER: 60/078004
FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/077632
                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1997-11-03
APPLICATION
                                                                                                                                                                                       FILING DATE:
                           APPLICATION
                                          APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roy, Maryu...
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Botstein, David
Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09978681A
                                                                     DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sophia S.
                           NUMBER: 60/079664
                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sherman
NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nicholas
                                                                                                                                1998-03-20
                                                                                                                                                                                                                                                                                                                                       1998-03-11
                                                                                                                                                                                                                                                                                                                                                                  1998-03-10
             1998-03-27
                                           1998-03-
                                                                       1998-03-25
                                                                                                     1998-03-20
                                                                                                                                                            1998-03-20
                                                                                                                                                                                        1998-03-20
                                                                                                                                                                                                                                                                                                            1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۳.
60/079689
                                                        60/079656
                                                                                    60/079294
                                                                                                                60/078939
                                                                                                                                              60/078910
                                                                                                                                                                         60/078936
                                                                                                                                                                                                        60/078886
                                                                                                                                                                                                                                                                                                                                                                                 60/077450
                                                                                                                                                                                                                                                                                                                                                                                                             60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   [F]
```

and

Nucleic

1998-03-27

```
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR PRIOR
  PRIOR
PRIOR
PRIOR
                                  PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R FILING DATE: 1998-03-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-03-
R APPLICATION NUMBER: 6
R APPLICATION NUMBER: 6
R FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R FILING DATE: 1998-04-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-
R APPLICATION NUMBER: 6
R APPLICATION N
R FILING DATE:
R APPLICATION N
                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04-1
APPLICATION NUMBER: 60
TTITING DATE: 1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/1
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/
FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FI
                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-0.
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081195
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-0 APPLICATION NUMBER:
                                  APPLICATION I
                                                         APPLICATION | FILING DATE:
                                                                                APPLICATION FILING DATE:
                                                                                                        FILING DATE:
                                                                                                                   FILING DATE:
APPLICATION |
                                                                                                                                          APPLICATION
                                                                                                                                                     FILING DATE:
                                                                                                                                                                APPLICATION
                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                       FILING DATE:
APPLICATION
                                                                                                                                                                                                             APPLICATION
                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                     FILING DATE:
APPLICATION
                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                  APPLICATION
                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LING DATE:
                                 NUMBER: 60/0
E: 1998-04-29
                                                                                                                                                                                                 NUMBER: 60
 : 1998-04-29
NUMBER: 60/0
                         NUMBER:
                                                         NUMBER: 60/0: 1998-04-28
                                                                                           NUMBER:
                                                                                                                    NUMBER:
                                                                                                                                          NUMBER:
                                                                                                                                                                NUMBER:
                                                                                                                                                                                       NUMBER:
                                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-03-31
                                                                                                        1998-04-23
                                                                                                                                                                           1998-04-22
                                                                                                                                                                                                                                                                                                                                          1998-04-15
                                                                                                                                                                                                                                                                                                                                                                1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-03-
                                                                                                                              1998-04-22
                                                                                                                                                     1998-04-22
                                                                                                                                                                                                                          1998-04-21
                                                                                                                                                                                                                                                1998-04-21
                                                                                                                                                                                                                                                                      1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                      1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-03-30
                                                                                  1998-04-
                                                                                                                                                                                                                                                                                                                   1998-04-15
                         60/083495
                                              60/083392
                                                                     60/083322
                                                                                             60/083336
                                                                                                                    60/082796
                                                                                                                                          60/082797
                                                                                                                                                                60/082700
                                                                                                                                                                                        60/082804
                                                                                                                                                                                                               60/082704
                                                                                                                                                                                                                                     60/082569
                                                                                                                                                                                                                                                           60/082568
                                                                                                                                                                                                                                                                                  60/081838
                                                                                                                                                                                                                                                                                                        60/081952
                                                                                                                                                                                                                                                                                                                               60/081819
                                                                                                                                                                                                                                                                                                                                                     60/081817
                                                                                                                                                                                                                                                                                                                                                                             60/081955
                                                                                                                                                                                                                                                                                                                                                                                                   60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/079663
```

```
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                              PRIOR
                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                              R FILING DATE: 1998-05-07
PR APPLICATION NUMBER: 6070
PR FILING DATE: 1998-05-07
PR APPLICATION NUMBER: 6070
PR FILING DATE: 1998-05-13
R FILING DATE: 1998-05-1;
R APPLICATION NUMBER: 60,
R FILING DATE: 1998-05-1;
R APPLICATION NUMBER: 60,
R FILING DATE: 1998-05-1;
R APPLICATION NUMBER: 60,
R APPLICATION NUMBER: 60,
R APPLICATION NUMBER: 60,
                                                                                                      FILING DATE:
APPLICATION 1
                                                                                                                                                APPLICATION NUMBER: 60/
FILING DATE: 1998-05-15
                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                            APPLICATION
                                                                                                                                                                                                                          FILING DATE: APPLICATION
                                                                                                                                                                                                                                                       FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-05 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-0
APPLICATION NUMBER:
FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/084366
FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/083499
                                                                                                                                     APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DATE:
 NUMBER: 60/085697: 1998-05-15
                                                                                                                                                                                          NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER: 60/084598
                                                                                                        NUMBER:
                                                                                                                                    NUMBER:
                                                                                                                                                                                                                          NUMBER: 60/085582
                                                                                                                                                                                                                                                                                                                  NUMBER: 60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-29
                                                                                                                                                                                                                                                                     1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-29
                                                                                                                                                                               1998-05-
                                                                                                                                                                                                             1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-07
                                                                                                                      1998-05-15
                                                                                                                                                                                                                                         1998-05-
                             .998-05-15
                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                     60/085338
                                                                                                                                                                                                                                                                                                                                                                                                        60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/083545
                                                                          60/085573
                                                                                                      60/085580
                                                                                                                                    60/085579
                                                                                                                                                                                                                                                       60/085323
                                                                                                                                                                                                                                                                                                                                             60/084643
                                                                                                                                                                                                                                                                                                                                                                            60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083500
                                                                                                                                                                60/085689
                                             60/085704
                                                                                                                                                                                             /085700
```

```
Qy
                                         Дb
                                                                 Q_{\underline{Y}}
                                                                                               В
                                                                                                                       Qy
                                                                                                                                                   Matches
                                                                                                                                                                Query Match
Best Local 9
              121
                                                                                             134
                                         194
                                                                  61
                                                                                                          1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                       gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                       gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                          atgaaaaccatccagccaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                                                                                   1032;
                                                                                                                                                                Similarity
                                                                                                                                                100.0%; llarity 100.0%; Conservative 0
                                                                                                                                                  0,:
                                                                                                                                                Score 1032; DB 5;
Pred. No. 6.3e-290;
Mismatches 0;
                                                                                                                                                                             Length
                                                                                                                                                     Indels
                                                                                                                                                                              1679;
                                                                                                                                                   0;
                                                                                                                                                  Gaps
               180
                                                                     120
                                          253
                                                                                                                          60
```

0;

B

254

gctatggacaacgtgacggtccggcaggggggggggcgccaccctcaggtgcactattgac

밁 QY

Qy В δÃ B δÃ B Qy

```
US-09-978-757A-522
                                                                                                                   Sequence 522, Application US/09978757A GENERAL INFORMATION:
                                          APPLICANT:
APPLICANT:
                                                                                     APPLICANT:
                                                                                                       APPLICANT: Ashkenazi, Avi
   APPLICANT:
                             APPLICANT:
                                                                                                                                                                                                              1154
                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                      1094
                                                                                                                                                                                                                                                                                                                                1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              374
                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                           974
                                                                                                                                                                                                                                                                                                                                                                                                                                                   914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314
                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                          cttctcaaattt 1032
                                                                                                                                                                                                                                                                    atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                              cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                            ctgggccacacccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tycagtycctccaatyacytygyccycycccytygtacygagagtaaagytcpccytyaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcaccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gagatecagaacgtggatgtgtatgacgagggeeettacacetgeteggtgeagacagae
                                                                                                                                                                                                                                                                                                  aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttcttggtcttgcacctg
                                                                                                                                                                                                                                                                                                                              ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                         atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                   agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                          Botstein, David
Desnoyers, Luc
Eaton, Dan
Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
                                                                                     Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                           1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                433
                                                                                                                                                                                                                                                                                                   1020
                                                                                                                                                                                                                                                                                                                                 1093
                                                                                                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            553
                                                                                                                                                                                                                                                                                                                                                                                                                                                     973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: p2630P1C26
CURRENT APPLICATION NUMBER: US/09/978
CURRENT FILING DATE: 2002-03-19
FRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                          PRIOR
                                                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wood, WITITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                  R FILING DATE: 1998-03-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-03-
R APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/065311
FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/
FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                        APPLICATION NUMBER: FILING DATE: 1998-03 APPLICATION NUMBER:
                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                     FILING DATE: 1998-03-25
APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                 FILING DATE: 1998-0
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078939
                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 1998-03
                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                    FILING
                                                                                  APPLICATION NUMBER:
                                                                                                  APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27
                                                                                                                                 FILING DATE:
                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 1998-03
                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/09/978,757A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INVENTION: Secreted and Transmembrane Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Williams, P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shelton, David L. Stewart, Timothy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen, Mary
Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kljavin, Ivar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pan, James;
                                                                      DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  William
NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             i, J.
, Austin L.
, nneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nicholas
                                                                    1998-03-27
                                                                                                                                 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-13
              1998-03-
                                                                                                                                                                                            1998-03-27
                                                                                                                                                                                                                          1998-03-26
                                                                                                                                                                                                                                                                                  1998-03-20
                                                                                                                                                                                                                                                                                                                                              1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-11
                                           1998-03-30
                                                                                                                                                               1998-03-27
                                                                                                                                                                                                                                                                                                                                                                          1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/077641
60/080105
                          60/079923
                                                        60/079920
                                                                                     60/079786
                                                                                                                                              60/079663
                                                                                                                                                                           60/079689
                                                                                                                                                                                                         60/079664
                                                                                                                                                                                                                                                                    60/079294
                                                                                                                                                                                                                                                                                                                                                            60/078936
                                                                                                                                                                                                                                                                                                                                                                                         60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                     60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic
```

Qy dd Q В Ωy 밁 Qy В Ş 밁

B Qy Вb Qy 밁 Š 밁 Qγ B Qy Дb

FILING

1998-03-31

```
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
               PRIOR
PRIOR
                                                                                                                      PRIOR
PRIOR
PRIOR
                                                                                                                                                                 PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OR APPLICATION NUMBER: 60/0
SR FILING DATE: 1998-04-01
DR APPLICATION NUMBER: 60/0
DR FILING DATE: 1998-04-01
DR APPLICATION NUMBER: 60/0
DR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/083545
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08354
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08358
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08359
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083500
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083500
OR FILLING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OR APPLICATION NUMBER: 60/081203
OR FILING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081229
OR FILING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081955
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081817
OR APPLICATION NUMBER: 60/081817
OR APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DR FILLICATION NUMBER: 60/08
R FILLIG DATE: 1998-04-15
BR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/08
DR EFILING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/08
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-04-21
DR FILLING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                    R FILING DATE: 1998-04-
R APPLICATION NUMBER: (R
R FILING DATE: 1998-04-
R FILING DATE: 1998-04-
R FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080165 FILING DATE: 1998-03-31
                                                                                                                                                                 APPLICATION NUMBER: 60/083496 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083499
                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-0.
APPLICATION NUMBER:
FILING DATE: 1998-0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/0
                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/082569 FILING DATE: 1998-04-21
                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                        1998-04-28
                                                                                                                                                    1998-04-
                                                                                                                                                                                                               1998-04-
                                                                                                                                                                                                                                             1998-04-29
                                                                                                                                                                                                                                                                                                       1998-04-27
                                                                                                                                                                                                                                                                                                                                     1998-04-23
                                                                                                                                                                                                                                                                                                                                                                   1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/080194
                                                                                                                                                                                                                                                             60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/080328
                                                                                                                                                                                                                             60/083495
                                                                                                                                                                                                                                                                                         60/083322
                                                                                                                                                                                                                                                                                                                      60/083336
                                                                                                                                                                                                                                                                                                                                                     60/082796
                                                                                                                                                                                                                                                                                                                                                                                60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                            60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/081838
```

```
В
                            δÃ
                                                          멍
                                                                                   δÃ
                                                                                                                 В
                                                                                                                                           Qy
                                                                                                                                                                        망
                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                DЬ
                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/084598
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1998-05-07 PRIOR APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
  434
                                                                                                                314
                            301
                                                          374
                                                                                   241
                                                                                                                                              181
                                                                                                                                                                        254
                                                                                                                                                                                                   121
                                                                                                                                                                                                                                 194
                                                                                                                                                                                                                                                                                       134
                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R FILING DATE: 1998-05-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-05-
R APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R APPLICATION NUMBER: 60/
R FILING DATE: 1998-05-13
R APPLICATION NUMBER: 60/
R FILING DATE: 1998-05-13
R APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R FILING DATE: 1998-05-
R APPLICATION NUMBER: (
R FILING DATE: 1998-05-
R APPLICATION NUMBER: (
                                                                                                                                                                                                                                                                                                     1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/083742
FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085689 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085700
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                              aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                            aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                    gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                             gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                      atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                      gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                              gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                     aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                         DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE:
                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                         1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-
                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/084627
5-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085338
5-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                      60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -07
                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                             Score 1032; DB 5;
Pred. No. 6.3e-290;
                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                           Length 1679;
                                                                                                                                                                                                                                                                                                                                                Indels
```

0; Gaps

0;

433

300 373 240 313

493 360 180

120 193 60

δ δ

Дb Ş 밁 Qy D.

```
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan
APPLICANT: Ferrara, Napole
APPLICANT: Filvaroff, Elle
APPLICANT: Filvaroff, Elle
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Georitsen, Mary
APPLICANT: Gerritsen, Mary
APPLICANT: Goddward, Audrey
APPLICANT: Goddward, Paul
APPLICANT: Grimaldi, J. Ch
APPLICANT: Grimaldi, J. Ch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-978-564A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 522, Application US/09978564A GENERAL INFORMATION:
       APPLICANT:
                                                                        APPLICANT:
                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021 cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 854 ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atttcttcagatatctcccattaatgaagggaacaatattagcctcacctgcatagcaact 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tatocaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tgcagtgcctccaatgacgtggccgcgcccgtggtacggaggagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgccgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaaet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agactgattgaaggaaaggaggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                      Godowski, Paul J. Grimaldi, J. Christopher Gurney, Austin L.
                                                                        Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                            Gerritsen, Mary E. Goddard, Audrey
                                                                                                                                                                                                                                                                                                                  Ferrara, Napoleon
Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                      Botstein, David
Desnoyers, Luc
                      Kuo, Sophia S.
Napier, Mary A.
                                                                                                                                                                                                                                                                  Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                        Kevin P
                                                                                                                                                                                                                                              Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            613
                                     PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILLING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILLING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/076354
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077641
PRIOR FILLING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077804
PRIOR APPLICATION NUMBER: 60/078806
PRIOR APPLICATION NUMBER: 60/078806
PRIOR APPLICATION NUMBER: 60/078936
PRIOR APPLICATION NUMBER: 60/079939
PRIOR APPLICATION NUMBER: 60/079636
PRIOR APPLICATION NUMBER: 60/079639
PRIOR APPLICATION NUMBER: 60/079640
PRIOR APPLICATION NUMBER: 60/079640
PRIOR APPLICATION NUMBER: 60/0796640
PRIOR APPLICATION NUMBER: 60/07972660
PRIOR APPLICATION NUMBER: 60/079920
PRIOR APPLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: P2630P1C25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                           FILING DATE:
  APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/978,564A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wood, William I. V_{\text{T}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Paoni, Nicholas F.
NUMBER:
                           1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acids Encoding the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001-10-
60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic
```

δÃ Db δõ

B

Qy Дb QΥ 밁 QΥ Дb QΥ Дb δÃ ₽

В

```
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-
PRIOR FILING DATE: 1998-04-
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-
PRIOR APPLICATION NUMBER: 6
PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-
PRIOR FILING DATE: 1998-04-
PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1998-04-
PRIOR FILING DATE: 1998-04-
PRIOR FILING DATE: 1998-04-
                                             PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                          DR FILING DATE: 1998-04
DR APPLICATION NUMBER: ()
DR FILING DATE: 1998-05
DR APPLICATION NUMBER: ()
DR FILING DATE: 1998-05
DR APPLICATION NUMBER: ()
DR APPLICATION NUMBER: (
                                                                                                                                                                                                                                                                                                                           OR APPLICATION NUMBER:
1988-04
PR FILING DATE: 1998-04
PR APPLICATION NUMBER:
1988-04
PR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DR APPLICATION NUMBER: 60/082568
OR FILING DATE: 1998-04-21
OR FILING DATE: 1998-04-21
OR FILING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/082704
OR FILING DATE: 1998-04-22
OR FILING DATE: 1998-04-22
OR FILING DATE: 1998-04-22
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082804
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082700
OR FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DR APPLICATION NUMBER: 60/081195
DR FILING DATE: 1998-04-08
DR FILING DATE: 1998-04-09
DR FILING DATE: 1998-04-09
DR APPLICATION NUMBER: 60/081229
DR FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OR FILING DATE: 1998-04-15
RE APPLICATION NUMBER: 60/0:
RE FILING DATE: 1998-04-15
RE FILING DATE: 1998-04-15
RE FILING DATE: 1998-04-15
                                          R FILING DATE:
R APPLICATION N
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R FILING DATE:
R APPLICATION N
R FILING DATE:
                                                                                                                                                                                                                                                                              FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60 FILING DATE: 1998-04-1 APPLICATION NUMBER: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60 FILING DATE: 1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DATE:
                     NUMBER:
                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER:
                                                1998-05-07
                                                                                             1998-05-06
                                                                                                                                                                                                                                                      1998-04-30
                                                                                                                                                                                                                                                                                                      1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-01
1998-05-07
                                                                                                                                                1998-05-06
                                                                                                                                                                                                   1998-05-05
                                                                                                                                                                                                                                                                                                                                                           1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/083336
4-27
                     60/084639
                                                                                                                        60/084441
                                                                                                                                                                                                                                                                              60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081819
                                                                  60/084637
                                                                                                                                                                                                                              60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083495
                                                                                                                                                                        60/084414
                                                                                                                                                                                                                                                                                                                                                                                   60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/081071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29
```

```
PRIOR FILING DATE: 1998-05-07
PRIOR FILING DATE: 1998-05-07
PRIOR FILING DATE: 1998-05-07
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/0853:
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/08533:
PRIOR APPLICATION NUMBER: 60/08533:
PRIOR FILING DATE: 1998-05-13
PRIOR FILING DATE: 1998-05-13
PRIOR PRILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08582
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08589
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085580
RIOR APPLICATION NUMBER: 60/085580
RIOR APPLICATION NUMBER: 60/085573
IOR APPLICATION NUMBER: 60/085573
                                                                                                                     δÔ
                                                                                                                                                                                                        δõ
                                                                                맑
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Best 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084627
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
614
                                       481
                                                                                554
                                                                                                                     421
                                                                                                                                                                 494
                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134
                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
mes 1032; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION
                                                                                             atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                  aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                             99tagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                       atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                          aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                        aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                   aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER: 60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1032; DB 5; Pred. No. 6.3e-290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
```

0;

Gaps

0;

120 193 60

ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg

480

553 420 493 433

300

360

373

240

313 180

```
γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-999-831A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 522,
                                       TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                APPLICANT:
                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                            APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                 APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
FILE REFERENCE: P2630P1C68
CURRENT APPLICATION NUMBER: US/09/999,831A
CURRENT FILING DATE: 2002-03-25
                                                                     APPLICANT:
                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                         APPLICANT
                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agactgattgaaggaaaggaggggtgaaagtggaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tycagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc\\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgggccacccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                       T: Williams, P. Mickey
T: Wood, William I.
INVENTION: Secreted and Transme
INVENTION: Acids Encoding the
                                                                                                                                                                             Kljavin, Ivar J.
Kuo, Sophia S.
Napier, Mary A.
                                                                                                                                                                                                                                                                                                                             Gao,
                                                                                                                                                                                                                                                                                                                                       Fong,
                                                                                                                                                                                                                                                                                                                                                                                                     Botstein, David
                                                                                                         Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                        Grimaldi, J. Christopher Gurney, Austin L.
                                                                                                                                                                                                                                                                                 Goddard, Audrey
                                                                                                                                                                                                                                                                                               Gerber, Hanspeter
Gerritsen, Mary E
                                                                                                Tumas, Daniel
                                                                                                                                                                                                                                                                    Godowski, Paul
                                                                                                                                                                                                                          Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                      Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                  Eaton,
                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers, Luc
                                                                                                                                                       Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/09999831A
                                                                                                                                                                      James;
                                                                                                                                                                                                                                                                                                                             Wei-Qiang
                                                                                                                                                                                                                                                                                                                                          Sherman
                                                                                                                                                                                                                                                                                                                                                                                  Dan
                                                                                                                                                       Nicholas F
                                                                                                                                                                                                                                                                                                                                                                    Napoleon
                                                                                                                                                                                                                                                                     <u>.</u>
                                                      Transmembrane
                                          Same
                                                      Polypeptides
                                                       and
                                                       Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        793
```

```
; ORGANISM: Homo sapiens US-09-999-831A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 6
Prior Application r
SEQ ID NO 522
LENGTH: 1679
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                벍
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                           Q
                                                                                                                                Qy
                                                                                                                                                                                  Qy
                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                              ρ
                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ъ
 В
                       δÃ
                                                    Дb
                                                                                                      g
                                                                                                                                                           B
                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
 974
                          841
                                                                                                        854
                                                                                                                                                                                      661
                                                                                                                                                                                                                734
                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                     674
                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                              554
                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134
                                                    914
                                                                               781
                                                                                                                                  721
                                                                                                                                                             794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               دے
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                        tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                    ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                         atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageace
                                                                                                                                                                                                                                                                                                                                                                                                                                            aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aagtggtgcctggatcctogcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
atettetteaatgtetetgaacatgaetatgggaactaeacttgegtggeeteeaacaag
             atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                agactgattgaaggaaaggaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                    ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                           tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                       ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                           atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                              aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                   agactgattgaaggaaaggaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                        ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                          tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                             tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                    agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1032; DB 5;
Pred. No. 6.3e-290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                  553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
  1033
                                                                                                                                                                                                                                                                        733
                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                               613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                           900
                                                      973
                                                                                840
                                                                                                           913
                                                                                                                                     780
                                                                                                                                                                853
                                                                                                                                                                                       720
                                                                                                                                                                                                                  793
                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                           673
                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                Qy
                                                                   밁
                                                                                                                                B
                                                                                                                                                          γç
                                                                                                                                                                                                                                                                           ; TYPE: DNA; Homo sapiens; ORGANISM: Homo sapiens US-09-999-829A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-999-829A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QΥ
      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 522, Application US/09999829A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                       Prior Application removed - See File Wrapper or Palm SEQ ID NO 522 LENGTH: 1679
                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: APPLICANT:
                                                                                                                                                                                                Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
APPLICANT: Botstein, Dav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: P2630P1C61
CURRENT APPLICATION NUMBER: US/09/999,829A
CHRENT FILING DATE: 2002-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                          CURRENT FILING DATE: 200: NUMBER OF SEQ ID NOS: 624
                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021 cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1034 ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc 1093
      254
                                   121
                                                                   194
                                                                                                                                134 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                                61
                                                                                                                                               l atgasaaccatccagccasaaatgcacaattctatctctttgggcaatcttcacggggctg
gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                                                gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgcacctg 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ctgggccaccaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                            h 100.0%; Score 1032; DB 5;
Similarity 100.0%; Pred. No. 6.3e-290;
32; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumas, Daniel Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Goddard,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ferrara, Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Audrey
                                                                                                                                                                                                                          Length 1679;
                                                                                                                                                                                            Indels
                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic
                                                                                                                                                                                            Gaps
                                                                 253
                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                              0
Sequence 522, Application US/09978375A
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Keyin P.
APPLICANT: Botstein, David
APPLICANT: Botstein, Luc
APPLICANT: Desnoyers, Luc
APPLICANT: Feton, Dan
APPLICANT: Fetrara, Napoleon
APPLICANT: Filvaroff, Ellen
                                                                                                                                             US-09-978-375A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                              RESULT
```

```
뮍
                                                          B
                                                                                    Qy
                                                                                                                   В
                                                                                                                                             Ωy
                                                                                                                                                                          B
                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                      DЪ
                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
 1154
                                                          1094
                             1021 cttctcaaattt 1032
                                                                                      961
                                                                                                                   1034
                                                                                                                                                                            974
                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                             854
                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                              734
                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                901
                                                                                                                                                                                                                                     914
                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                      794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                        aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgtcacctg 1020
                                                                                                                                                                                      atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                              agactgattgaaggaaaggagaggtgaaagttggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                              agartgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                    tatccaccatacatttcagaagccaagggtacaggtgtccccgttgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aagtggtgcctggatectcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
ctgggccacaccaatgccagcatcatgctatttggtccagggcgccgtcagcgaggtgagc
                                                                                                                                                                         atettetteaatgtetetgaacatgaetatgggaactaeacttgegtggeeteeaacaag
                                                                                                                                                                                                                                                                                            ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                        ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                            tgcagtgcctccaatgacgtggccgcgcgcggtgacgggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                   ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                     tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                              tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                    1093
                                                                                                                                                                            1033
                                                                                                                                                960
                                                                                                                                                                                                       900
                                                                                                                                                                                                                                      973
                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                        853
                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                               913
                                                                                                                                                                                                                                                                                                                                                                                                                 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
```

```
; TYPE: DNA
; ORGANISM: HOMO
US-09-978-375A-522
                                                                                   ΩV
                                                                                                                                           20
                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽
                        V<sub>Q</sub>
                                                         B
                                                                                                                   B
                                                                                                                                                                          В
                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                            No.
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity Matches 1032; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Prior Application removed - See File Wrapper or
NUMBER OF SEQ ID NOS: 624
SEQ ID NO 522
LENGTH: 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/978,375A CURRENT FILING DATE: 2002-04-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                          434
                                                                                                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                                                                                    254
                                                                                                                                                                                                                                                                                                                                                                                                            194
 614
                            481
                                                         554
                                                                                      421
                                                                                                                   494
                                                                                                                                              361
                                                                                                                                                                                                        301
                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                          aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                         aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                gctatggacaacgtgacggtccggcagggggagagcgcccccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                        gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
            ggtagaccagagcctacggttacttggagacacatctctcccaaagcgggttggctttgtg 540
                                                                                      atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                         aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgccagtacagcatc
                                                                                                                                                                                                                                                                                                                                                  gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                         gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                          aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                         atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaaet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gurney, Austin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Goddard,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            We1-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1032; DB 5;
Pred. No. 6.3e-290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Palm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                      480
                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                             493
                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
 673
                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                              253
                                                         613
                                                                                                                   553
                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                             373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
```

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ΩY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-978-423A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 522, Applic
; GENERAL INFORMATION;
       TITLE OF INVENTION: SecretariTITLE OF INVENTION: Acids FILE REFERENCE: P2630P1C21
                                                                      APPLICANT: APPLICANT:
                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                             APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
CURRENT APPLICATION NUMBER: US/09/978,423A
                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                       APPLICANT
                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841 atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ctgggccacaccaatgccagcatcatgctatttggtccaggcgcgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tgcagtgcctccaatgacgtggccgcgcgcgcgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agactgattgaaggaaaggaggggtgaaagtggaaaacagaccttttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tatecaccatacattteagaagecaagggtacaggtgteeegtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttcttggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atettetteaatgtetetgaacatgaetatgggaactacaettgegtggeetecaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                         INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
                                                                                                                                                                                                     Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                          Williams, P. Mickey Wood, William I.
                                                                                                                                Paoni, Nicholas F
Roy, Margaret Ann
                                                                                                                                                                                            Kuo,
                                                                                                                                                                                                                                                                             Gerritsen, Mary E. Goddard, Audrey
                                                                                                                                                                                                                                                                                                                            Gao,
                                                                                                                                                                                                                                                                                                                                       Fong,
                                                                                       Tumas, Daniel
                                                                                                  Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                   Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                            Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                        Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                      Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                    Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                 Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                               Botstein, David
                                                                                                                                                                         Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application
                                                                                                                                                                                         Sophia S.
                                                                                                                                                                                                                                                                                                                         Wei-Qiang
                                                                                                                                                                                                                                                                                                                                          Sherman
                                                                                                                                                                                                                                                                                                                                                                      Napoleon
                           Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                        Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/09978423A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                913
```

CURRENT FILING DATE: 2002-05-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/064249
PRIOR ETILING DATE: 1997-017-30
PRIOR PRIOR APPLICATION NUMBER: 60/064249
PRIOR PRIOR DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/06534
PRIOR ETILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077641
PRIOR PRILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077641
PRIOR PRILING DATE: 1998-03-11
PRIOR PRILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077649
PRIOR PRILING DATE: 1998-03-11
PRIOR PRILING DATE: 1998-03-11
PRIOR PRILING DATE: 1998-03-11
PRIOR PRILING DATE: 1999-03-12
PRIOR APPLICATION NUMBER: 60/077649
PRIOR PRILING DATE: 1999-03-12
PRIOR PRILING DATE: 1999-03-12
PRIOR PRILING DATE: 1999-03-20
PRIOR PRILING DATE: 1999-03-27
PRIOR PRILING DATE: 1999-03-31
PRIOR PRILING DATE: 1999-03-03-09
PRIOR PRICING DATE: 1999-03-09
PRIOR PRIOR PRIOR PRINCH PRINCH PRINCH PRINCH PRINCH PRINCH PRINCH PRINCH PRI

PRIOR FILLING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/081838
PRIOR FILLING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082568
PRIOR FILLING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082569
PRIOR FILLING DATE: 1998-04-21
PRIOR PRIOR DATE: 1998-04-21
PRIOR PRIOR FILLING DATE: 1998-04-22
PRIOR FILLING DATE: 1998-04-22
PRIOR PRIOR FILLING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082700
PRIOR FILLING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082797
PRIOR FILLING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082797
PRIOR FILLING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082797
PRIOR FILLING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILLING DATE: 1998-04-23
PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILLING DATE: 1998-04-23
PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILLING DATE: 1998-04-23
PRIOR FILLING DATE: 1998-04-23 PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 66/
PRIOR FILING DATE: 1998-05-07 PRIOR APPLICATION NUMBER: 60/081819 PRIOR FILING DATE: 1998-04-15 PRIOR APPLICATION NUMBER: 60/081952 DR FILING DATE: 1998-05-05
DR APPLICATION NUMBER: 60/084414
DR FILING DATE: 1998-05-06
DR APPLICATION NUMBER: 60/084441
DR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084637
OR FILING DATE: 1998-05-07 OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083558
OR ETILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083559
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083500
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083742
OR FILING DATE: 1998-04-30
OR APPLICATION NUMBER: 60/084366
OR APPLICATION NUMBER: 60/084366
OR FILLING DATE: 1998-04-30
OR FILLING DATE: 1998-04-30
OR FILLING DATE: 1998-04-30 OR APPLICATION NUMBER: 60/083496
OR FILLING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083499
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083545
OR APPLICATION NUMBER: 60/083540
OR APPLICATION NUMBER: 60/083554
OR FILLING DATE: 1998-04-29
OR FILLING DATE: 1998-04-29 DR FILING DATE: 1998-04-27

RAPPLICATION NUMBER: 60/083322

DR FILING DATE: 1998-04-28

RAPPLICATION NUMBER: 60/083392

DR FILING DATE: 1998-04-29

DR APPLICATION NUMBER: 60/083495

DR FILING DATE: 1998-04-29

DR FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/081817 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081229 FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/081955 FILING DATE: 1998-04-15 FILING APPLICATION NUMBER: 60/084643 APPLICATION NUMBER: 60/084598 APPLICATION NUMBER: 60/084640 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084639 FILING DATE: 1998-05-07 FILING DATE: 1998-04-23 APPLICATION NUMBER: 60/083336 APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081203 FILING DATE: 1998-04-09 DATE: NUMBER: 60/085339 1998-05-07 60/084627 60/084600

```
δÃ
                                                                     Qγ
                                                                                                                      Qy
                                                                                                                                                                          Qy
                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                    Дb
                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                      Dβ
                                                                                                                                                                                                                                                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
  밁
                                               DЬ
                                                                                                 B
                                                                                                                                                  밁
                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1998-05-
                                                                                                 674
                                                                                                                                                  614
                          199
                                               734
                                                                         601
                                                                                                                         541
                                                                                                                                                                           481
                                                                                                                                                                                                    554
                                                                                                                                                                                                                                                                                                       434
                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                      374
                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194
  794
                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                     494
                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085573
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 6 FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-05
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-05-
                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                 atttcttcagatatctccattaatgaagggaacaatattagcctcacctgc tagcaact
                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaanttgtagag
                                                                                                                                                                                                                                                                                                                                                                  aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atgaaaaccatccagocaaaaatgcacaattctatctcttgggcaatcttcacggggctg
           tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                           tgcagtgcctccaatgacgtggccgcgcccgtggtacggaggtaaaggtcaccgtgaac
                                                                                                                                                              ggtagaccagagcctacggttacttggagacacatctctcccaaaaggggttggctttgtg
                                                                                                                                                                                                    atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                     aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                      gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                              agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                 ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                   aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                       aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct.jggaatgac
                                               tgcagtgcctccaatgacgtggccgcgcccgtggtacggaggtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1032; DB 5; Pred. No. 6.3e-290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193
                                                                                                                          600
                                                                                                                                                   673
                                                                                                                                                                                                    613
                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
 853
                                                                        660
                                                                                                 733
                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253
                                               793
                                                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
```

```
US-10-013-921A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                          PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 522,
                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                             TITLE OF
                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/013,921A CURRENT FILING DATE: 2002-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Ashkenazi, Avi
                                                                                                                                                                                                  FILE REFERENCE: P2630P1C84
                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1154 cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021 cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10
 FILING DATE:
APPLICATION |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgcacctg 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagggaggtgagc 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agactgattgaaggaaaggaggggtgaaagtggaaaacagaccttttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                            INVENTION: Secreted and Transmembrane Polypeptides and Nucleic INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                           Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                         Tumas, Daniel
                                                                                                                                                                                                                                                                                                                      Roy,
                                                                                                                                                                                                                                                                                                                                                                               Kljavin, Ivar J.
Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                             Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                        Stewart,
                                                                                                                                                                                                                                                                                                    Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                     Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Baker Kevin
                                                                                                                                                                                                                                                                                                                                     Paoni, Nicholas F
                                                                                                                                                                                                                                                                                                                                                                  Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/10013921A
                                                                                                                                                                                                                                                                                                                    Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wei-Qiang
NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherman
               1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanspeter
                                                                                                                                                                                                                                                                                    Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
סי
60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     973
```

PRIOR APPLICATION NUMBER: 60/080327
PRIOR FILING DATE: 1998-04-01
PRIOR PELICATION NUMBER: 60/080328
PRIOR APPLICATION NUMBER: 60/080328
PRIOR FILING DATE: 1998-04-01
PRIOR REPLICATION NUMBER: 60/080333
PRIOR FILING DATE: 1998-04-01
PRIOR FILING DATE: 1998-04-01
PRIOR FILING DATE: 1998-04-01
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/081070
PRIOR APPLICATION NUMBER: 60/081049
PRIOR APPLICATION NUMBER: 60/081049
PRIOR APPLICATION NUMBER: 60/081049
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081049 PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR OR APPLICATION NUMBER: 60/077649
OR FILING DATE: 1998-03-11
OR APPLICATION NUMBER: 60/077791
OR FILING DATE: 1998-03-12
OR APPLICATION NUMBER: 60/078004
OR FILING DATE: 1998-03-13
OR APPLICATION NUMBER: 60/078886 OR FILING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081229
OR APPLICATION NUMBER: 60/081229
OR APPLICATION NUMBER: 60/081955
OR FILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/081817
OR FILING DATE: 1998-04-15
OR FILING DATE: 1998-04-15
OR FILING DATE: 1998-04-15
OR FILING DATE: 1998-04-15 OR APPLICATION NUMBER: 60/079689
OR FILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/07963
OR ETLING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/079728
OR FILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/079786
OR FILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/079780
OR FILING DATE: 1998-03-30
OR FILING DATE: 1998-03-30
OR FILING DATE: 1998-03-30 OR APPLICATION NUMBER: 60/078910
OR FILING DATE: 1998-03-20
OR FILING DATE: 1998-03-20
OR FILING DATE: 1998-03-20
OR APPLICATION NUMBER: 60/079294
OR FILING DATE: 1998-03-25
OR FILING DATE: 1998-03-26
OR FILING DATE: 1998-03-26
OR FILING DATE: 1998-03-26
OR FILING DATE: 1998-03-27
OR FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/080105 FILING DATE: 1998-03-31 FILING DATE: 1998-03-10 APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-11 APPLICATION NUMBER: 60/081195 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081203 APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080165 FILING DATE: 1998-03-31 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078936 FILING DATE: 1998-03-20 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: 60/ FILING DATE: 1998-03-31 FILING APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: 1998-0 DATE: 1998-03-1 NUMBER: 60/081952 1998-04-15 1998-04-08 60/077641 60/077632 60/081071 60/080194 PRIOK MEELS

PRIOR FILLING DATE: 1998-05-15

PRIOR FILLING DATE: 1998-05-15

PRIOR APPLICATION NUMBER: 60/085700

PRIOR FILLING DATE: 1998-05-15

PRIOR FILLING DATE: 1998-05-15

PRIOR APPLICATION NUMBER: 60/08569

PRIOR APPLICATION NUMBER: 60/08569

PRIOR APPLICATION NUMBER: 60/08569 PRIOR APPLICATION NUMBER: 60/084639
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084640
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084598
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
PRIOR FILING DATE: 1998-05-07
PRIOR FILING DATE: 1998-05-07 PRIOR APPLICATION NUMBER: 60/08354
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/08358
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/08359
PRIOR TILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083500
PRIOR APPLICATION NUMBER: 60/083500
PRIOR APPLICATION NUMBER: 60/083742
PRIOR APPLICATION NUMBER: 60/083742
PRIOR APPLICATION NUMBER: 60/083742
PRIOR APPLICATION NUMBER: 60/083742 PRIOR APPLICATION NUMBER: 60/084627
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION UNMBER: 60/084643
PRIOR FILING DATE: 1998-05-07 PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-06 PRIOR FILING DATE: 1998-0-PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0-PRIOR APPLICATION NUMBER: 60/085339 PRIOR FILING DATE: 1998-05-13 PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084637
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084639
PRIOR APPLICATION NUMBER: 60/084639 PRIOR APPLICATION NUMBER: 60/084366
PRIOR FILING DATE: 1998-05-05 APPLICATION NUMBER: 60/085338 FILING DATE: 1998-05-13 APPLICATION NUMBER: 60/084414

1998-04-29

60/084441

60/083545

PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082700
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082797
PRIOR EILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILING DATE: 1998-04-23
PRIOR PRILING DATE: 1998-04-23
PRIOR PRILING DATE: 1998-04-23
PRIOR PRILING DATE: 1998-04-23
PRIOR PRILING DATE: 1998-04-28
PRIOR PRILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/08332
PRIOR APPLICATION NUMBER: 60/083495
PRIOR PILING DATE: 1998-04-29
PRIOR PILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083495
PRIOR APPLICATION NUMBER: 60/083495
PRIOR APPLICATION NUMBER: 60/083496
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083496
PRIOR TILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083496 OR APPLICATION NUMBER: 60/01
REFILING DATE: 1998-04-15
OR APPLICATION NUMBER: 60/01
OR AFILING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/01
OR APPLICATION NUMBER: 60/01 APPLICATION NUMBER: 60/1 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082804 60/082704 60/082569 60/082568 60/081838

```
.. .. .. .. .. .. ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DЪ
                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                      ρV
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
 뫄
                         ρy
                                                       멍
                                                                                Q
                                                                                                                B
                                                                                                                                        Qy
                                                                                                                                                                       밁
                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/085580
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Si
Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                           494
 974
                                                                                                                                                                                                                                                                                      674
                                                                                                                                                                                                                                                                                                                                            614
                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                     554
                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194
                            841
                                                       914
                                                                                                                 854
                                                                                                                                                                         794
                                                                                                                                                                                                    661
                                                                                                                                                                                                                             734
                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                   781
                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   سر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                           ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                 atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                        aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaccgggtcacccgggtggcctggctaaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
             atettetteaatgtetetgaacatgactatgggaactacacttgcgtggcetecaacaag
                                                                      agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc%caaaactc
                                                                                                                             ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                             tgcagtgcctccaatgacgtggccgcgcccgtggtacggaggtaaaggtcaccgtgaac
                                                                                                                                                                                                                                            tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                  agtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                   atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag 1033
                                                                                                              ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                      tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                     tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                   agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                            ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1032; DB 6; Pred. No. 6.3e-290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                          900
                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          193
                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                   613
                                                                                                                                                                                                                                                                                                                                                                                                                                                           553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                   840
                                                                                                                                           780
                                                                                                                                                                       853
                                                                                                                                                                                                 720
                                                                                                                                                                                                                               793
                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                            673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                913
                                                                                                                                                                                                                                                                                      733
                                                       973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
```

```
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-013-929A-522
                                                                                                     PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILLING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILLING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/066361
PRIOR FILLING DATE: 1997-11-21
PRIOR PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILLING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 522,
GENERAL INFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                 PRIOR PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C89 CURRENT APPLICATION NUMBER: US/10/013,929A CURRENT FILING DATE: 2002-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1154 cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961 aacggcacgtcgaggggggggctgcttgcgtctggctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901 ctgggccacaccaatgccagcatcatgctatttggtccagggcgccgtcagcgaggtgagc
                                 FILING DATE: 1998-03-12
APPLICATION NUMBER: 60/078004
                   FILING DATE:
                                                                      APPLICATION NUMBER: 60/077791
                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Williams, P. Mic Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10013929A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sherman
NUMBER: 60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dan
                                                                                        1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nicholas F
                   1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   יטי
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1093
```

```
PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OR APPLICATION NUMBER: 60/079920
OR FILLING DATE: 1998-03-30
OR APPLICATION NUMBER: 60/079923
OR FILLING DATE: 1998-03-30
OR APPLICATION NUMBER: 60/080105
OR FILLING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080107
OR FILLING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080165
OR APPLICATION NUMBER: 60/080165
OR FILLING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                      DR FILING DATE: 1998-04-09
DR APPLICATION NUMBER: 60/081229
DR FILING DATE: 1998-04-09
DR APPLICATION NUMBER: 60/081955
DR FILING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/081817
                                   FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082804
FILING DATE: 1998-04-22
                                                                                                                                                                                              FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081838
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081071
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081195
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/079728
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079786
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22
                                                                                                FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082704
                                                                                                                 APPLICATION NUMBER: 60/082568
FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082569
FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/081819 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/
FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/079663 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 6 FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078939
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078936
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER: 60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/078910
```

```
PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILING DATE: 1998-04-23
PRIOR APPLICATION NUMBER: 60/08336
PRIOR FILING DATE: 1998-04-27
PRIOR APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084639
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/083559
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION UNMBER: 60/083500
PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION UNMBER: 60/083392
PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/9
PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OR APPLICATION NUMBER: 60/083499
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083545
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083554
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083558
OR APPLICATION NUMBER: 60/083558
OR APPLICATION NUMBER: 60/083558
                                                APPLICATION NUMBER: 60/085573
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-0
APPLICATION NUMBER:
FILING DATE: 1998-0
               APPLICATION NUMBER: 60/
                                                                                                           APPLICATION NUMBER: 60/085580 FILING DATE: 1998-05-15
                                                                                                                                              APPLICATION NUMBER: 60 FILING DATE: 1998-05-1
                                                                                                                                                                                                                        APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60 FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/085323 FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 607
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/084627 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/084600 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/084366
FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/083742
FILING DATE: 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/082797
FILING DATE: 1998-04-22
FILING DATE:
                                                                                                                                                                                    FILING DATE: 1998-05-
                                                                                                                                                                                                          APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/083495
                                                                                                                                                                                                      NUMBER:
NUMBER: 60/085697
1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-29
                                                                                                                                                                                                                                                                                                                                                      60/085338
                                                                                                                                                                 60/085579
                                                                                                                                                                                                    60/085689
                                                                                                                                                                                                                                                                              60/085582
                                                                                                                                                                                                                                                                                                                                                                                           60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083496
```

```
Matches 1032;
        1154
                                                                                                                                                                          1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                               974
                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                               914
                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                   854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
        cttctcaaattt 1165
                                              cttctcaaattt 1032
                                                                                    aacgcacgtcgaggagggcaggctgctctggctgctcttctggtctttcagctctg
                                                                                                                                                                                            ctgggccacccactgccagcatcatgctatttggtccaggcgcgtcagcgaggtgagc
                                                                                                                                                                                                                                                        atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                 atettetteaatgtetetgaacatgactatgggaactaeacttgegtggeeteeaacaag
                                                                                                                                                                                                                                                                                                                                               agactgattgaaggaaaggaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                   agactgattgaaggaaaggagaggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                                                              aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg 1020
                                                                                                                                                                    ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                               ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                    1153
                                                                                                                                                                        1093
                                                                                                                                                                                                                                                          1033
                                                                                                                                                                                                                                                                                                                                               973
                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                       ETILE REFERENCE: P2630P1C77

CURRENT APPLICATION NUMBER: US/10/013,918A

CURRENT FILING DATE: 2002-03-25

PRIOR APPLICATION NUMBER: 09/918585

PRIOR FILING DATE: 2001-07-30

PRIOR FILING DATE: 1997-10-17

PRIOR PPLICATION NUMBER: 60/062250

PRIOR PPLICATION NUMBER: 60/064249

PRIOR PPLICATION NUMBER: 60/065311

PRIOR PPLICATION NUMBER: 60/065311

PRIOR PPLICATION NUMBER: 60/065311

PRIOR PILING DATE: 1997-11-23

PRIOR APPLICATION NUMBER: 60/077450

PRIOR PRICING DATE: 1998-03-10

PRIOR PPLICATION NUMBER: 60/077649

PRIOR PPLICATION NUMBER: 60/077641

PRIOR APPLICATION NUMBER: 60/077649

PRIOR PILING DATE: 1998-03-11

PRIOR APPLICATION NUMBER: 60/077649

PRIOR PILING DATE: 1998-03-11

PRIOR APPLICATION NUMBER: 60/077791

PRIOR APPLICATION NUMBER: 60/07791

PRIOR APPLICATION NUMBER: 60/0778004

PRIOR APPLICATION NUMBER: 60/078004

PRIOR PILING DATE: 1998-03-12

PRIOR APPLICATION NUMBER: 60/078004

PRIOR PILING DATE: 1998-03-20

PRIOR APPLICATION NUMBER: 60/078936

PRIOR PILING DATE: 1998-03-20

PRIOR PILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
US-10-013-918A-522
; Sequence 522, Application US/10013918A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and
TITLE OF INVENTION: Acids Encoding the Same
                                          PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
FILING DATE: 1998-03-26
APPLICATION NUMBER: 60/
                                       APPLICATION NUMBER: 60/079656
                                                           APPLICATION NUMBER: 60/
FILING DATE: 1998-03-25
                                                                                                   APPLICATION NUMBER: 60/078910 FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078939 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roy, Margaret Ann
Shelton, David L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paoni, Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pan, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              שי
60/079664
                                                                                  60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (F)
```

Nucleic

20

Db Db

B

QУ

QУ

Db Db

DЬ

Qy

Db Qy Db 20

Qy Qy

밁

dd

APPLICATION NUMBER: FILING DATE: 1998-0:

60/079689

1998-03-1998-03-27

```
밁
                                                                                    Qy
                                                                                                                           Db
                                                                                                                                                           Qy
                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                              Best Local Similarity Matches 1032; Conserv
                                                                                                                                                                                                                                                                    PRIOR FILING DATE: PRIOR APPLICATION | PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/0 PRIOR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/0 PRIOR FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1998-0: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 50/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/083554 PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/083496 PRIOR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE:
           121 gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                      194
                                                                                                                       134 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                        61
                                                                                                                                          1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg 60
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/085582
                                                                   gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                gotgototgtgtotottccaaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 253
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER:
                                                                                                                                                                                                                                                                                      NUMBER: 60/085697
                                                                                                                                                                                                                                                                      1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-07
                                                                                                                                                                                                                                                                                                     1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-29
                                                                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-
                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083545
                                                                                                                                                                                                                                                                                                                          60/085704
                                                                                                                                                                                                                                                                                                                                                            60/085573
                                                                                                                                                                                                                                                                                                                                                                                             60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084414
                                                                                                                                                                                              0;
                                                                                                                                                                                                               Score 1032; DB 6;
Pred. No. 6.3e-290;
                                                                                                                                                                                              Mismatches
                                                                                                                                                                                              0;
                                                                                                                                                                                                                            Length 1679;
                                                                                                                                                                                              Indels
```

PRIOR PRIOR

APPLICATION NUMBER: 60/081071 FILING DATE: 1998-04-08

APPLICATION NUMBER: 60/081195

1998-04-08

60/081203

PRIOR APPLICATION NUMBER: 60/ PRIOR FILING DATE: 1998-04-08

60/081049

PRIOR

APPLICATION NUMBER: 60/081070 FILING DATE: 1998-04-08

FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080334 APPLICATION NUMBER: 60/080328 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080333 APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31 FILING DATE: 1998-03-31

FILING DATE: 1998-04-01

PRIOR PRIOR

PRIOR

PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081955

FILING DATE: 1998-04-15

APPLICATION NUMBER: 60/081229 FILING DATE: 1998-04-09 FILING DATE: 1998-0.
APPLICATION NUMBER: PRIOR PRIOR

PRIOR PRIOR

PRIOR

PRIOR PRIOR

PRIOR

FILING DATE:

1998-03-31

APPLICATION NUMBER: 60/080165

PRIOR

FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080107

APPLICATION NUMBER: 60/080105

PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30

APPLICATION NUMBER: FILING DATE: 1998-0:

1998-03-30

60/079920

APPLICATION NUMBER: 60/079786 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/079663 FILING DATE: 1998-03-27

PRIOR PRIOR

APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-23

APPLICATION NUMBER: 60/083336
FILING DATE: 1998-04-27
APPLICATION NUMBER: 60/083322

FILING DATE: 1998-04-28 APPLICATION NUMBER: 60/

60/083392

FILING DATE:

FILING DATE: 1998-04-29

NUMBER: 60/083495 1998-04-29 PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/082797

0; Gaps

0;

APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22

FILING DATE: 1998-04-22

PRIOR PRIOR

APPLICATION NUMBER:

APPLICATION NUMBER: 60/082704

1998-04-22

60/082804

PRIOR

PRIOR PRIOR PRIOR

FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/082568
FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082569
APPLICATION NUMBER: 61/082569
FILING DATE: 1998-04-21

PRIOR PRIOR PRIOR

FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081838 APPLICATION NUMBER: 60/081819 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081952

PRIOR PRIOR

PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0

1998-04-15

60/081817

PRIOR

```
RESULT 13
US-10-017-082A-522
                                                         Sequence 522, Application US/10017082A GENERAL INFORMATION:
APPLICANT: Ashkennazi, Avi APPLICANT: Baker Kevin P.
               APPLICANT: APPLICANT:
                                              APPLICANT:
                                                                                                                                                                                      1154
                                                                                                                                                                                                                                                 1094
                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                            1034
                                                                                                                                                                                                                                                                                                                                                                                                                                    914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                        974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctyggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctnygaatgac 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                  agactgattgaaggaaaggaggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaacttgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                             aacggcacgtcgaggagggcaggctgcgtctggctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                               aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                            ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                          ctgggccacacccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                       atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                    atcttcttcaatgtctctgaacatgactatgggaactacactttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tgcagtgcctccaatgacgtggccgcgcgccgtggtacggaggtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                      cttctcaaattt 1165
                                                                                                                                                                                                                 cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                  agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tatecaecataeattteagaageeaagggtaeaggtgteeegtgggaeaaaaggggaea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
Ferrara, Napoleon
               Eaton,
                              Desnoyers, Luc
                                              Botstein, David
                 Dan
                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                        1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           853
                                                                                                                                                                                                                                                                                                                                                                                                                                     973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: P2630
CURRENT APPLICATION N
CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OR APPLICATION NUMBER: 60/065311
OR FILING DATE: 1997-11-13
OR APPLICATION NUMBER: 60/066364
OR FILING DATE: 1997-11-21
OR APPLICATION NUMBER: 60/077450
OR FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/062250
FILING DATE: 1997-10-17
APPLICATION NUMBER: 60/064249
FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078936
FILING DATE: 1998-03-20
APPLICATION NUMBER: 60/078910
                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-03-12
APPLICATION NUMBER: 60/078004
FILING DATE: 1998-03-13
APPLICATION NUMBER: 60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                             FILING DATE: 1998-03
APPLICATION NUMBER:
FILING DATE: 1998-03
                                                                                                                       FILING DATE: 1998-03 APPLICATION NUMBER:
                 FILING
                              APPLICATION NUMBER:
                                              FILING DATE:
                                                           APPLICATION NUMBER:
                                                                            FILING DATE:
                                                                                         FILING DATE: 1998-03 APPLICATION NUMBER:
                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/10/017,082A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INVENTION: Secreted and Transmembrane Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Goddard, Audrey
Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gurney,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hillan, Kenneth
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kuo, Sophia S.
               DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P2630P1C71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nicholas
   NUMBER:
                 1998-03-30
                                                                              1998-03-
                                                                                                         1998-03-27
                                                                                                                                                                                                                                  1998-03-
                                                                                                                                                                                                                                                                                             1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-
                                                                                                                                                                      1998-03-27
                                                                                                                                                                                                    1998-03-
                                                                                                                                                                                                                                                               1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hanspeter
                                              1998-03-
                                                                                                                                       1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                    60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/077641
                                                                                                                                                                                                                 60/079656
   60/079923
                              60/079920
                                                            60/079786
                                                                                           60/079728
                                                                                                                         60/079663
                                                                                                                                                       60/079689
                                                                                                                                                                                      60/079664
                                                                                                                                                                                                                                                 60/079294
                                                                                                                                                                                                                                                                               60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ч
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and Nucleic
```

δÃ B Q B Qy

20 DЪ 2 В Q_{Y} Дb Q 밁 δÃ B Ş В Qy 밁 Qy В δÃ В Q В

Ωy DЬ Qγ Дb

밁

FILING DATE: 1998-03-30 APPLICATION NUMBER: 60/080105 FILING DATE: 1998-03-31

PRIOR PRIOR

APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01

60/080334

FILING DATE: 1998-04-01

PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/080328 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080333

APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 APPLICATION NUMBER: 60, FILING DATE: 1998-03-31 APPLICATION NUMBER: 60, FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/ FILING DATE: 1998-03-31

60/080327 60/080194 60/080165 60/080107

PRIOR PRIOR PRIOR

```
δõ
                                                                                       20
                                                                                                                                                              2
                                                                                                                                                                                                                                   ρ
                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                             B
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                р
                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 1032; DB 6; Best Local Similarity 100.0%; Pred. No. 6.3e-290; Matches 1032; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                      301
                                                         374
                                                                                         241
                                                                                                                             314
                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                         194
                                                                                                                                                              181
                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085323
OR PRILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085582
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085700
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085689
OR APPLICATION NUMBER: 60/085689
OR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OR APPLICATION NUMBER: 60/084640
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084598
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084600
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084627
OR APPLICATION NUMBER: 60/084627
OR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OR APPLICATION NUMBER: 60/
DR FILING DATE: 1998-05-15
DR APPLICATION NUMBER: 60/
DR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R APPLICATION NUMBER: 60/01
WA FILLING DATE: 1998-05-07
PR APPLICATION NUMBER: 60/01
WA FILLING DATE: 1998-05-13
WA RAPPLICATION NUMBER: 60/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                         1 atgaaaaccatccagccaaaaatgcaccaattctatctctttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-05-05
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                       aaccyggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                          aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                              gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                               gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                   gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                      gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                          atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                    aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/084637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                      433
                                                                                     300
                                                                                                                         373
                                                                                                                                                                                              313
                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                       253
                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                           240
```

PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/08
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/08
PRIOR APPLICATION NUMBER: 60/08
PRIOR APPLICATION NUMBER: 60/08
PRIOR APPLICATION NUMBER: 60/08
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/08
PRIOR PRICE PRIOR PRIOR

0;

60/083336

OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082804
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082700
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082797
OR APPLICATION NUMBER: 60/082797
OR FILING DATE: 1998-04-23
OR APPLICATION NUMBER: 60/082796
OR FILING DATE: 1998-04-23
OR FILING DATE: 1998-04-23
OR FILING DATE: 1998-04-23

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/082568

60/082704 60/082569 APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-15

FILING DATE: 1998-04-15

FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081819

PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR

FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081955
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081817

PRIOR PRIOR

APPLICATION NUMBER: 60/081203 FILING DATE: 1998-04-09

APPLICATION NUMBER:

60/081229

PRIOR PRIOR PRIOR PRIOR PRIOR

OR APPLICATION NUMBER: 60/081070
DR FILLING DATE: 1998-04-08
DR APPLICATION NUMBER: 60/081049
DR FILING DATE: 1998-04-08
DR APPLICATION NUMBER: 60/081071
DR FILING DATE: 1998-04-08
DR APPLICATION NUMBER: 60/081195
DR APPLICATION NUMBER: 60/081195
DR FILING DATE: 1998-04-08

PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR

FILING DATE:

1998-04-29 1998-04-

APPLICATION NUMBER:

60/083554 60/083545

APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29

NUMBER:

60/083559

PRIOR PRIOR

APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: 1998-04-

PRIOR PRIOR PRIOR PRIOR PRIOR

FILING DATE: 1998-0.
APPLICATION NUMBER:

1998-04-29

60/083499

FILING DATE: 1998-04-29

APPLICATION NUMBER:

60/083496

60/083495 60/083392 60/083322

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                              US-10-119-480-125
                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                            APPLICANT: Baker, Kevin P.
APPLICANT: Desnoyers, Luc Gerritsen,
APPLICANT: Godard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grime, Austin L.
APPLICANT: Smith, Victoria
                                                                                                                                                                                                                                                                                             Sequence 125, Application US/10119480 GENERAL INFORMATION:
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3530P1C1
CURRENT APPLICATION NUMBER: US/10/119,480
CURRENT FILING DATE: 2002-04-09
NUMBER OF SEQ ID NOS: 246
Prior Application removed - See File Wrapper or Palm
SEQ ID NO 125
                                                                                                                                  APPLICANT:
                                                                                                                                                 APPLICANT:
                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                               cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                           aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctgggccacaccaatgccagcatcatgctatttggtccagggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atettetteaatgtetetgaaeatgaetatgggaaetaeaettgegtggeeteeaaeag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                Stephan, Jean-Philippe Watanabe, Colin L. Wood, William I.
                                                                                                                                                                                                                                                                Luc Gerritsen,
                                                                                                                                                                  'nj
                                                                                                                                                                                                                                                                Mary
                                                                                                                    AND
                                                                                                                  NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                493
```

```
US-10-119-480-125
₽
                   Qy
                                                   Дb
                                                                           Qy
                                                                                                       밁
                                                                                                                            Qy
                                                                                                                                                             밁
                                                                                                                                                                                     Qy
                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 1679
TYPE: DNA
ORGANISM: Hom
 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314
                          901
                                                    974
                                                                                                        914
                                                                                                                                                             854
                                                                                                                                                                                                                 794
                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                      734
                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                           674
                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                614
                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                      554
                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134
                                                                                                                                  781
                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctgctctgtgtctctttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
         ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                 tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac 660
                                                                                                                                                                                                                                                                                                                                                                                          ggtagaccagagcctacggttacttggagacacatctctcccaaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                 atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctatggacaacgtgacggtccggcagggggggggggcgccaccctcaggtgcactattgac
ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                   atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                 atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                      agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                     agactgattgaaggaaagaagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                           ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                        ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                 tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                              tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                    tgcagtgcctccaatgacgtggccgccgcgtggtacggaggtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                          agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                          agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                              ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                    atttetteagatateteeattaatgaagggaacaatattageeteacetgcatageaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1032; DB 6;
Pred. No. 6.3e-290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
 1093
                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                    1033
                                                                                                                                  840
                                                                                                                                                              913
                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                             733
                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                          973
                                                                                                                                                                                                                   853
                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                       793
                                                                                                                                                                                                                                                                                                                                                                                   673
                                                                                                                                                                                                                                                                                                                                                                                                                                      613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
```

```
US-10-121-049-375; Sequence 375, Application US/10121049; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
   Дb
                                 Qy
                                                                   Db
                                                                                                 Qy
                                                                                                                                    ₽
                                                                                                                                                                 QΥ
                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                         Å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo Sapien US-10-121-049-375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 550
SEQ ID NO 375
LENGTH: 1679
                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Sin
Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Wood, William
APPLICANT: Abang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P333OR1C17
CURRENT APPLICATION NUMBER: US/10/121,049
CURRENT APPLICATION NUMBER: US/10/121,049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Baker, Kevin P. APPLICANT: Beresini, Maur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1154 cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021 cttctcaaattt 1032
 434
                                                                                                                                      314
                                                                                                                                                                                                                                                                           194
                                     301
                                                                     374
                                                                                                    241
                                                                                                                                                                      181
                                                                                                                                                                                                        254
                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                           134 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                            Match 100.0%;
Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                           1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Prior Application removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                  gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
               aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac 240
                                                                                                                                                                                                                                                                                         gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
gagatecagaacgtggatgtgtatgacgagggeeettacacetgeteggtgeagacagae 493
                                                                 aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc 433
                                                                                      aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc 300
                                                                                                                                    aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                         gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Desnoyers, Luc Filvaroff, Ellen Gao, Wei-Qiang Gerritsen, Mary E. Goddard, Audrey Goddwski, Paul J. Gurney, Austin L. Sherwood, Steven Smith, Victoria Stewart, Tinothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumas,Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DeForge, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beresini, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1032; DB 6;
Pred. No. 6.3e-290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 See File Wrapper or Palm
                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AND
                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1020
                                                                                                                                      373
                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                              0;
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                     δÃ
                                                                                                                        밁
                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                       밁
                           Qy
                                                             g
                                                                                                                                                    Qy
                                                                                                                                                                                     밁
 1154
                              1021
                                                             1094
                                                                                                                        1034
                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361 aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                          961
                                                                                                                                                                                     974
                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                               914
                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                           854
                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                       794
                                                                                                                                                                                                                                                                                                                                                                                                                                  734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                      aacggcacgtcgaggagggcaggctgcgtctggctgctcttctggtcttgcacctg 1020
                                                                                                                                                                                                  atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                    tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                             tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
cttctcaaattt 1165
                            cttctcaaattt 1032
                                                         aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                     ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                     ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                  atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                            agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                            agactgattgaaggaaaggaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                         ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                        ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                   tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                               tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atttetteagatateteeattaatgaagggaacaatattageeteacetgcatagcaact 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    553
                                                                                                                                                                                     1033
                                                                                                                                                                                                                                                 973
                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                             913
                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                          853
                                                                                                                                                                                                                                                                                                                                                                                                                                    793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                        1093
                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               733
```

Search completed: July 12, 2002, 00:32:21 Job time: 11044 sec

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pending_Patents_NA_Main:*
1: /cgn2_6/ptodata/2/pna/PCTUS_COMB.seq:*
2: /cgn2_6/ptodata/2/pna/US06_COMB.seq:*
3: /cgn2_6/ptodata/2/pna/US07_COMB.seq:*
4: /cgn2_6/ptodata/2/pna/US080_COMB.seq:*
5: /cgn2_6/ptodata/2/pna/US081_COMB.seq:*
6: /cgn2_6/ptodata/2/pna/US082_COMB.seq:*
6: /cgn2_6/ptodata/2/pna/US083_COMB.seq:*
7: /cgn2_6/ptodata/2/pna/US083_COMB.seq:*
8: /cgn2_6/ptodata/2/pna/US085_COMB.seq:*
9: /cgn2_6/ptodata/2/pna/US085_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hits satisfying chosen parameters:
        IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-700-397-1
1032
1 atgaaaaccatccagccaaa.....tgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    July 11, 2002, 20:38:02; Search time 5033.46 Seconds (without alignments) 4435.759 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21979536 segs, 10817449327 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          // Jpna/US082_COMB. seq: *
// cgn2_6/ptodata/2/pna/US083_COMB. seq: *
// cgn2_6/ptodata/2/pna/US084_COMB. seq: *
// cgn2_6/ptodata/2/pna/US084_COMB. seq: *
// cgn2_6/ptodata/2/pna/US085_COMB. seq: *
// cgn2_6/ptodata/2/pna/US085_COMB. seq: *
// cgn2_6/ptodata/2/pna/US085_COMB. seq: *
// cgn2_6/ptodata/2/pna/US088_COMB. seq: *
// cgn2_6/ptodata/2/pna/US089_COMB. seq: *
// cgn2_6/ptodata/2/pna/US089_COMB. seq: *
// cgn2_6/ptodata/2/pna/US089_COMB. seq: *
// cgn2_6/ptodata/2/pna/US089_COMB. seq: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                          /cgn2_6/ptodata/2/pna/US091_COMB.seq:*
/cgn2_6/ptodata/2/pna/US092_COMB.seq:*
/cgn2_6/ptodata/2/pna/US092_COMB.seq:*
/cgn2_6/ptodata/2/pna/US094_COMB.seq:*
/cgn2_6/ptodata/2/pna/US094_COMB.seq:*
/cgn2_6/ptodata/2/pna/US095B.COMB.seq:*
/cgn2_6/ptodata/2/pna/US095B.COMB.seq:*
/cgn2_6/ptodata/2/pna/US095B.COMB.seq:*
/cgn2_6/ptodata/2/pna/US096A.COMB.seq:*
/cgn2_6/ptodata/2/pna/US096B.COMB.seq:*
/cgn2_6/ptodata/2/pna/US098B_COMB.seq: *
/cgn2_6/ptodata/2/pna/US098C_COMB.seq: *
/cgn2_6/ptodata/2/pna/US099C_COMB.seq: *
/cgn2_6/ptodata/2/pna/US099C_COMB.seq: *
/cgn2_6/ptodata/2/pna/US099C_COMB.seq: *
/cgn2_6/ptodata/2/pna/US099C_COMB.seq: *
/cgn2_6/ptodata/2/pna/US101_COMB.seq: *
/cgn2_6/ptodata/2/pna/US101_COMB.seq: *
/cgn2_6/ptodata/2/pna/US6001_COMB.seq: *
/cgn2_6/ptodata/2/pna/US6001_COMB.seq: *
/cgn2_6/ptodata/2/pna/US6003_COMB.seq: *
/cgn2_6/ptodata/2/pna/US6003_COMB.seq: *
/cgn2_6/ptodata/2/pna/US6004_COMB.seq: *
```

/cgn2_6/ptodata/2/pna/US6005_COMB.seq:* /cgn2_6/ptodata/2/pna/US6006_COMB.seq:* /cgn2_6/ptodata/2/pna/US6006_COMB.seq:* /cgn2_6/ptodata/2/pna/US6009_COMB.seq:* /cgn2_6/ptodata/2/pna/US6009_COMB.seq:* /cgn2_6/ptodata/2/pna/US6011_COMB.seq:* /cgn2_6/ptodata/2/pna/US6011_COMB.seq:* /cgn2_6/ptodata/2/pna/US6011_COMB.seq:* /cgn2_6/ptodata/2/pna/US6013_COMB.seq:* /cgn2_6/ptodata/2/pna/US6015_COMB.seq:* /cgn2_6/ptodata/2/pna/US6015_COMB.seq:* /cgn2_6/ptodata/2/pna/US6015_COMB.seq:* /cgn2_6/ptodata/2/pna/US6015_COMB.seq:* /cgn2_6/ptodata/2/pna/US6016_COMB.seq:* /cgn2_6/ptodata/2/pna/US6019_COMB.seq:* /cgn2_6/ptodata/2/pna/US6019_COMB.seq:* /cgn2_6/ptodata/2/pna/US6012_COMB.seq:* /cgn2_6/ptodata/2/pna/US6020_COMB.seq:* /cgn2_6/ptodata/2/pna/US6020_COMB.seq:* /cgn2_6/ptodata/2/pna/US6020_COMB.seq:* /cgn2_6/ptodata/2/pna/US6020_COMB.seq:* /cgn2_6/ptodata/2/pna/US6020_COMB.seq:* /cgn2_6/ptodata/2/pna/US6020_COMB.seq:* /cgn2_6/ptodata/2/pna/US6020_COMB.seq:* /cgn2_6/ptodata/2/pna/US6030_COMB.seq:* /cgn2_6/ptodata/2/pna/US6036_COMB.seq:* /cgn2_6/ptodata/2/pna/US6036_COMB.seq:* /cgn2_6/ptodata/2/pna/US6036_COMB.seq:* /cgn2_6/ptodata/2/pna/US6036_COMB.seq:* /cgn2_6/ptodata/2/pna/US6036_COMB.seq:* /cgn2_6/ptodata/2/pna/US6036_COMB.seq:* /cgn2_6/ptodata/2/pna/US6036_COMB.seq:* /cgn2_6/ptodata/2/pna/US6036_COMB.seq:*	74 75	72	70 71	69 88	66 67					55 05 05 05 05 05 05 05 05 05 05 05 05 0			J. J. ↓	л 53 Х 3	52	51	49	48:	47:	4.4	44	
	gn2_6/ptodata/2/pna/US6035_COMB.seq gn2_6/ptodata/2/pna/US6035_COMB.seq gn2_6/ptodata/2/pna/US6036_COMB.seq	2_6/ptodata/2/pna/US6033_COMB.seq 2_6/ptodata/2/pna/US6033_COMB.seq 2_6/ptodata/2/pna/US6034_COMB.seq	n2_6/ptodata/2/pna/US6031_COMB.seq n2_6/ptodata/2/pna/US6032_COMB.seq	<pre>/cgn2_6/ptodata/2/pna/US6029_COMB.seq // /cgn2_6/ptodata/2/pna/US6030_COMB.seq</pre>	<pre>.: /cgn2_6/ptodata/2/pna/US6027_COMB.seq : /cgn2_6/ptodata/2/pna/US6028_COMB.seq</pre>	<pre>. /cgn2_6/ptodata/2/pna/US6026_COMB.seq . /cgn2_6/ptodata/2/pna/US6026_COMB.seq</pre>	: /cgn2_6/ptodata/2/pna/US6024_COMB.seq	<pre>: /cgn2_6/ptodata/2/pna/US6022_COMB.seq . /cgn2_6/ptodata/2/pna/US6023_COMB.seq</pre>	: /cgn2_6/ptodata/2/pna/US6021_COMB.	<pre>: /cgn2_6/ptodata/2/pna/US6020_COMB.s</pre>	: /cgn2_6/ptodata/2/pna/US6018_COMB.s	<pre>/cgn2_6/ptodata/2/pna/US6017_COMB.s</pre>	/cgn2_6/ptodata/2/pna/US6016_COMB.s	gn2_6/ptodata/2/pna/US6014_COMB.s	gn2_6/ptodata/2/pna/US6013_COMB.s	gn2_6/ptodata/2/pna/US6012_COMB.s	n2_6/ptodata/2/pna/US6010_COMB.s	n2_6/ptodata/2/pna/US6009_COMB.s	n2_6/ptodata/2/pna/US6008_COMB.s	gnz_6/ptodata/z/pna/US6000_comp.s	gn2_6/ptodata/2/pna/US6005_COMB.s	

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Ĺ	ر د د	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7	6	ъ	4	ω	N	د ـــر	Result
	1000	1022	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	Score
	100.0							100.0		100.0	100.0		100.0		100.0	100.0					100.0	100.0	100.0	100.0	100.0	•					100.0	Query Match I
1070	1670	1670	1679	1679	1679	1679	67	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	1679	67	1679	67	67	1679	67	67	1679	67	1679	ű	1032	Length I
,	ر د د	بر 1	ω 6	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	ω 6	36	36	36	36	36	36	36	36	34	17	60	28	DB
10 002 3075 32	200	-10-003-706-	-09-99	-09-99	-09-99	-09-99	-09-981-	-09-97	8	-09-978	-09-978	-09-971	-09-978	-09-971	-09-97		-97	-09-97	-09-971	-09-978	-09-	-09-978-193A-52	-978	-09-978-1	-09-978-1	-09-978-189-52	-09-978	-09-918	-09-380-138-52	-60-213-	US-09-700-397-1	ID
date to the contract of	л н С С	103	522,	522,	522,	522,	Sequence 522, App	522,	•	522,	522,	522,	Sequence 522, App	522,	522,	522,	522,	522,	`	522,	Sequence 522, App	522,	522,	522,	522,	522,	522,	522,	522,	483,	App	Description

480

```
US-09-700-397-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens US-09-700-397-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                        Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/700,397
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: D7 10-131815
PRIOR FILING DATE: 1998-05-14
PRIOR APPLICATION NUMBER: PCT/JP99/0248:
PRIOR FILING DATE: 1999-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Ono Pha
TITLE OF INVENTION:
FILE REFERENCE: Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1032
                                                                                                                                                                                                                          gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcastattgac 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                             atgaaaaccatccagccaaaaatgcacaattctatctctttggccaatcttccacggggctg
             aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag 420
                                                                                                              aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                             aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaaacgcagtacagcatc
                                                                                                                                                                     aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                    gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                              atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                      gagatecagaacgtggatgtgtatgacgagggeeettacacetgeteggtgcagacagae
                                                                   gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccitccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09700397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ono Pharmaceutical Co.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q61459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polypeptides, cDNA encoding the same, and use of them
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-013-922A-522

US-10-017-191A-522

US-10-027-445A-522

US-10-028-072-375

US-10-066-193-103

US-10-066-193-103

US-10-066-203-103

US-10-066-211-103

US-10-066-273-103

US-10-066-273-103

US-10-066-273-103

US-10-066-494-103

US-10-066-494-103

US-10-066-559-103
                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1032; DB 28; Pred. No. 7.6e-288;
                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Séquence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           522, App
522, App
522, App
375, App
103, App
5103, App
103, App
                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                 300
                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                      RESULA

US-60-213-360-4483

; Sequence 4483, Application US/60213360

; GENERAL INFORMATION:

. APPLICANT: MORTIS, MacDonald
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                δδ
δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                S.
                                                                                                                                            SEQ ID NO 4483
LENGTH: 1333
                                                                                                                                                                                                                                      APPLICANT: Lal, Preeti
APPLICANT: Diep, Dinh
TITLE OF INVENTION: Method for the Ider
TITLE OF INVENTION: Polynucleotide Sequential OF INVENTION: Identified Thereby
                                                                                                                                                                                    FILE REFERENCE: GX-0014 P
CURRENT APPLICATION NUMBER: US/60/213,360
CURRENT FILING DATE: 2000-06-21
NUMBER OF SEQ ID NOS: 8347
                OTHER INFORMATION:
-60-213-360-4483
                                                                                                                                                                        SOFTWARE:
                                       OTHER INFORMATION: Incyte ID NAME/KEY: unsure LOCATION: 120, 124, 169, 173
                                                                                  FEATURE:
NAME/KEY: misc_feature
                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ctgcagtgtgaagcctcagcagtcccctcagcagaattcccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                       cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                   cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aacggcacgtcgaggagggcaggctgcgtctggctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttttcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgggccaccacatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                       PERL Program
                              a,
                            t, c,
                            g, or other
                                                                      No:
                                                                                                                                                                                                                                                          Identification of Sequence Polymorphisms ( Sequence Databases, and Single Nucleotide
```

840

780 780 720 720 660 660 600 600 540

840

960

900 900

QУ Дb Qγ

Qy DЬ Ŋ, ğ δÃ Б

361 361 301 301 241 241 181 181 121 121 61 61

Ωy Вþ δÃ

밁

QУ

Db Db

Db Qy Qy Db Db

84 P

```
Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                       1141
   1021
                                                                                                            1081
                                                                                                                                                                                   1021
                                                                                                                                                901
                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg.60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                             ctgggccacaccaatgccagcatcatgctatttggtccaggcgcgtcagcgaggtgagc
                                                                                                                                                                                                    atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                         agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                            tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  agtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
 cttctcaaattt 1032
                                     aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                        aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg 1020
                                                                                                          ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                               atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                     {\tt agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc}
                                                                                                                                                                                                                                                                                                                                                                 ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                   tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgcagtgcctccaatgacgtggccgcgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tgcagtgcctccaatgacgtggccgcgcccgtggtacggaggtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1032; DB 60;
Pred. No. 8.5e-288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                     1200
                                                                                                            1140
                                                                                                                                                                                   1080
                                                                                                                                                                                                                                                        1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                960
                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-09-380-138-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/UNDERCORPETING DATE: 1998-03-10
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: US 60,
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: US 60,
PRIOR FILING DATE: 1998-03-1
PRIOR FILING DATE: 1998-03-1
PRIOR APPLICATION NUMBER: US 60,
PRIOR FILING DATE: 1998-03-1
PRIOR APPLICATION NUMBER: US 60,
PRIOR FILING DATE: 1998-03-1
PRIOR APPLICATION NUMBER: US 60,
PRIOR APPLICATION NUMBER: US 60,
PRIOR APPLICATION NUMBER: US 60,
PRIOR FILING DATE: 1998-03-1
PRIOR APPLICATION NUMBER: US 60,
PRIOR APPLICATION NUMBER: US 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 522,
                                                                                       PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                              PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/380,138 CURRENT FILING DATE: 1999-08-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Baker, Kevin P
TITLE OF INVENTION: Novel
                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R FILING DATE:
R APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                        APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: APPLICATION
                                                    FILING DATE: APPLICATION
                                                                                       APPLICATION
                                                                                                          FILING DATE:
                                                                                                                                            FILING DATE:
                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                      APPLICATION
                                                                                                                                                                                                                                                     APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                            APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION
                                                                                                                                                                APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION
                                                                                                                                                                                                    APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard, Audrey
Gurney, Austin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yuan, Jean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09380138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N NUMBER:
1998-03-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P2630R1E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wood, William I.
                                                                                                                                                                                                                                      N NUMBER:
1998-03-30
US 6
                                                                                                                                                                                                                                                                                                                                                                                      NUMBER:
1998-03-
                                                                                                                                                                                                                                                                                                                                                                                NUMBER:
                  NUMBER:
                                                      NUMBER:
                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel Polypeptides and Nucleic Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-03-11
                                                                                                                                                                                                                                                                                                                                                                 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-11
                                                                                                                                                                                                                   1998-03-31
                                                                                                                                                                                                                                                                                                                              1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-12
                                   1998-04-01
                                                                                                            1998-03-31
                                                                                                                                                                               1998-03-31
                                                                                                                                                                                                                                                                                          1998-03-30
                                                                       1998-04-01
                                                                                                                                              1998-03-31
 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT/US99/05028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/077,450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                               SD
                                                                                                                                                                                                                                                                                                                                                                                  US
                                                                                                                                                                                                                                                                                                                                                                                                                      SU
                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SU
                Sn
                                                        SD
                                                                                         S
                                                                                                                             SD
                                                                                                                                                                                                    SD
                                                                                                                                                                                                                                                                                                             SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -20
                                                                                                                                                                                                                                                                                                                                                                                                                                        -27
                                                                                                                                                                                                                                                                                                                                                                                                       27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/079,786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/079,656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/078,004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/077,649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/077,641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/077,632
                60/080,334
                                                    60/080,327
                                                                                         60/080,333
                                                                                                                             60/080,107
                                                                                                                                                             60/080,194
                                                                                                                                                                                                60/080,165
                                                                                                                                                                                                                                    60/080,105
                                                                                                                                                                                                                                                                       60/079,920
                                                                                                                                                                                                                                                                                                           60/079,923
                                                                                                                                                                                                                                                                                                                                               60/079,663
                                                                                                                                                                                                                                                                                                                                                                                  60/079,689
                                                                                                                                                                                                                                                                                                                                                                                                                      60/079,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/079,728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/079,294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/078,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/078,939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/078,910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/078,886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09/040,220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/077,791
```

ОУ ОУ ОУ

QΥ

```
PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR PRIOR
                                                                              PRIOR
PRIOR
                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                PRIOR
                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                             R APPLICATION 1
R FILING DATE:
R APPLICATION 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 1998-04-09
FILING DATE: 1
APPLICATION NUMBER:
                            APPLICATION NUMBER: US. 1998-05-07
                                                        APPLICATION FILING DATE:
                                                                                                                             APPLICATION NUMBER: US (FILING DATE: 1998-05-05
                                                                                                                                                                         APPLICATION FILING DATE:
                                                                                                                                                                                                                                              APPLICATION NUMBER: US FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
FILING DATE:
1
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                   APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                           APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US (FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-04-21
APPLICATION NUMBER: US
FILING DATE: 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US (FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US (FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US (FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 60/080,328 FILING DATE: 1998-04-01
                                                                                FILING DATE:
                                                                                            APPLICATION
                                                                                                       FILING DATE:
                                                                                                                 APPLICATION
                                                                                                                                                      FILING DATE
                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                       APPLICATION NUMBER:
                                                                                             N NUMBER:
1998-05-06
πS €
                                                                                                                                                                 N NUMBER: 1998-04-29
                                                                                                                                                                                                              N NUMBER:
1998-04-29
US 6
                                                                                                                                                                                                                                                                                                                                N NUMBER:
1998-04-29
US 6
                                              NUMBER:
1998-05-07
                                                                                                                                                                                                                                                                                                           NUMBER:
1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-22
R: US 60/082,804
                                                                              1998-05-06
                                                                                                                                                   1998-04-30
                                                                                                                                                                                                  1998-04-29
                                                                                                                                                                                                                                                                      1998-04-29
                                                                                                                                                                                                                                                                                             1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                        1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-08
             1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SD
                                                                                                                                                                S
                                                                                                                                                                                                                                                                                  Sn
                                                                                                                                                                                                                                                                                                                                                                                                                           US
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 60/081,817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              us 60/081,955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sn
                       SD
                                                                                            SD
                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 60/082,568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 60/081,203
 SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/082,700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081,952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/081,838
 60/084,643
                       60/084,637
                                            60/084,639
                                                                   60/084,640
                                                                                            60/084,414
                                                                                                                  60/084,441
                                                                                                                                        60/084,366
                                                                                                                                                                60/083,742
                                                                                                                                                                                       60/083,500
                                                                                                                                                                                                                                   60/083,496
                                                                                                                                                                                                                                                           60/083,558
                                                                                                                                                                                                                                                                                  60/083,495
                                                                                                                                                                                                                                                                                                        60/083,554
                                                                                                                                                                                                                                                                                                                              60/083,545
                                                                                                                                                                                                                                                                                                                                                       60/083,499
                                                                                                                                                                                                                                                                                                                                                                             60/083,392
                                                                                                                                                                                                                                                                                                                                                                                                   60/083,322
                                                                                                                                                                                                                                                                                                                                                                                                                           60/083,336
                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/082,796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/082,767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/082,704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/082,569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/081,229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081,195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/081,049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/081,070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/081,071
                                                                                                                                                                                                             60/083,559
```

```
; ORGANISM: Homo sapiens US-09-380-138-522
                                         SEQ ID NO 522
                                                                                                                                                                                                                                                  PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                   NUMBER OF SEQ ID
                                                              PRIOR FILING DATE:
                                                                       PRIOR APPLICATION NUMBER:
                                                                                 PRIOR FILING DATE:
                                                                                                    PRIOR FILING DATE:
                                                                                                                PRIOR APPLICATION
                                                                                                                                             PRIOR FILING DATE:
                                                                                                                                                                                                           PRIOR FILING DATE:
                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE:
                    TYPE: DNA
                             ENGTH:
                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                   APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                   APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1
APPLICATION NUMBER:
                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                        FILING DATE
                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                          APPLICATION
                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                          APPLICATION
                                                                                                                                                                  FILING DATE
                                                                                                                                                                                                                     APPLICATION
                                                                                                                                                                                                                                         APPLICATION
                                                                                                                                                                                                                                                                                                      APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER
                                                                                                                                    APPLICATION
                               1679
                                                                                                                                                                                                                                        N NUMBER:
1998-05-18
US f
                                                                                                                                                                                                                                                                                                      N NUMBER: 1998-05-15
                                                   NOS:
                                                                                                                 NUMBER:
1998-05-28
                                                                                                                                                                                                                                                                                                                                                                                         NUMBER:
1998-05-15
                                                                                                               NUMBER:
                                                                                                                                                       NUMBER:
                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                NUMBER:
                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                   NUMBER: US 60/085,704
: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER:
                                                                                                                                                                                                                                                                                                                                                       1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-07
                                                                                                     1998-05-28
                                                                                                                                                                                                                                                                       1998-05-
                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                                                                                                                            1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-07
                                                                                1998-07-30
                                                                                                                                              1998-05-28
                                                                                                                                                                  1998-05-22
                                                                                                                                                                                       1998-05-22
                                                                                                                                                                                                           1998-05-22
                                                                                                                                                                                                                               1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SD
                                                                        SD
                                                                                                                S
                                                                                                                                                         S
                                                                                                                                                                            SD
                                                                                                                                                                                                 SD
                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                         us 60/085,582
                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                     us 60/085,580
                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               us 60/084,627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US 60/084,600
                                                                       60/100,038
                                                                                         60/094,651
                                                                                                               60/087,106
                                                                                                                                   60/087,098
                                                                                                                                                      60/087,208
                                                                                                                                                                           60/086,430
                                                                                                                                                                                                60/086,392
                                                                                                                                                                                                                    60/086,414
                                                                                                                                                                                                                                        60/086,486
                                                                                                                                                                                                                                                             60/086,023
                                                                                                                                                                                                                                                                                 60/085,700
                                                                                                                                                                                                                                                                                                    60/085,689
                                                                                                                                                                                                                                                                                                                                                                 60/085,579
                                                                                                                                                                                                                                                                                                                                                                                                          60/085,697
                                                                                                                                                                                                                                                                                                                                                                                                                             60/085,573
                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085,323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085,338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085,339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/084,598
```

밁 B Qy Db δÃ Query Match
Best Local Similarity
Matches 1032; Conserv 254 121 194 61 gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180 gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 253 gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120 Conservative 100.0%; Score 1032; DB 17; 100.0%; Pred. No. 9.5e-288; 0; Mismatches DB 17; 0; Indels Length 1679; 0; Gaps 313

0;

Qy 밁 Qγ δÃ Db Qy DЪ VQ VQ

멍

```
US-09-918-585A-522
; Sequence 522, Application US/09918585A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
 APPLICANT:
                APPLICANT:
                                                                                                                                                                                                                 1154
                                                                                                                                                                                                                                                1021
                                                                                                                                                                                                                                                                              1094
                                                                                                                                                                                                                                                                                                                                         1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                     974
                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atttetteagatateteeattaatgaagggaacaatattageeteaeetgeatageaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                   atettetteaatgtetetgaacatgaetatgggaactaeacttgegtggeeteeaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                   atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                             agactgattgaaggaaagaaaggggtgaaaagtggaaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tycagtycctccaatyacytygccycycycytygtacygagagtaaagytcaccytyaac 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cttctcaaattt 1032
                                                                                                                                                                                                                                                                                         aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                        ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                 cttctcaaattt
                                                                                                                                                                                                                                                                            aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttcttggtcttgcacctg
Fong,
                Ferrara, Napoleon Filvaroff, Ellen
                                                         Desnoyers, Luc
                                                                         Botstein, David
   Sherman
                                              Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373
                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                           1093
                                                                                                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                                                                                                                      1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR ETLING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17 PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-11-03 PRIOR APPLICATION NUMBER: 60/065311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Secreted and Transmembrane TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C1
                PRIOR
                                              PRIOR
PRIOR
                                                                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                         OR FILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/07963
OR FILING DATE: 1998-03-27
OR PILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/079728
OR APPLICATION NUMBER: 60/079786
OR FILING DATE: 1998-03-27
OR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                             R FILING DATE:
   R APPLICATION N
R FILING DATE:
R APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077641
FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077649
APPLICATION NUMBER: 61/077649
FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/078004 FILING DATE: 1998-03-13 APPLICATION NUMBER: 60/078886
                                                                                                                                                                                                                                APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/
FILING DATE: 1998-03-12
                                                                                                                                                                                                                    APPLICATION
                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-20
                                                APPLICATION NUMBER: FILING DATE: 1998-0
                                                                            APPLICATION |
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/918,585A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Godowski, Paul J
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shelton, David L. Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gao, Wei-Qiang
Gerber, Hanspe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wood, William I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sophia S.
                                 NUMBER:
                                                                                            NUMBER:
                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                 NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                              NUMBER: 60/079294
    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nicholas F.
                                                                                                                                                                                                                                                                                              1998-03-25
                                                                                                                                                                                                                                   1998-03-27
                                                                                                                                                                                                                                                                 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hanspeter
                                                 1998-03-30
                                                                              1998-03-30
                   1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/077791
                                 60/080105
                                                                                                                                                                                                                    60/079689
                                                                                                                                                                                                                                                                                                                                           60/078939
                                                                                                                                                                                                                                                                                                                                                                         60/078910
                                                                                                                                                                                                                                                                                60/079656
                                                                60/079923
    60/080107
                                                                                              60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polypeptides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic
```

Qy

밁 QΥ Ъ Qγ B QУ Дb

QУ 밁

Qy Ъ ρ B 20 B δÃ 맑 δÃ B

₽

```
PRIOR
PRIOR
                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OR APPLICATION NUMBER: 60/081071
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081195
OR FILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081203
OR FILING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081229
OR FILING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081817
                                                                                                                                                                                                                                                                                                           OR APPLICATION NUMBER: 60/082796
OR FILING DATE: 1998-04-23
OR APPLICATION NUMBER: 60/083336
OR TILING DATE: 1998-04-27
OR APPLICATION NUMBER: 60/083322
OR FILING DATE: 1998-04-28
OR APPLICATION NUMBER: 60/083392
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OR APPLICATION NUMBER: 60/081838
OR FILING DATE: 1998-04-15
OR FILING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/082569
OR APPLICATION NUMBER: 60/082569
OR FILING DATE: 1998-04-21
OR APPLICATION NUMBER: 60/082704
OR FILING DATE: 1998-04-22
OR FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/0
OR APPLICATION NUMBER: 60/0
OR APPLICATION NUMBER: 60/0
OR FILING DATE: 1998-03-31
OR FILING DATE: 1998-03-31
                                               APPLICATION NUMBER: 60/083559
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083500
                                                                                                  FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083558
FILING DATE: 1998-04-29
                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                      FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083499
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083545
                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/081952
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/081819 FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/081070 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/080334 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/080328 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01
APPLICATION
FILING DATE:
                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-04-01
                NUMBER: 60/083742
                               1998-04-29
1998-04-30
                                                                                                                                                                        1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/082797
                                                                                                                                                     60/083554
                                                                                                                                                                                                                                                                                              60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/082804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/080165
```

```
Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1998-0.
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 100
                                                          PRIOR FILING DATE: PRIOR APPLICATION I
                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                PRIOR FILING DATE:
                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: PRIOR APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER:
Local Similarity 100.0%; les 1032; Conservation
                                                                                                                                                                                                                                                                                                       OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/08
OR ETLING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05
APPLICATION NUMBER:
                                                                                                                                         APPLICATION NUMBER: 60/
FILING DATE: 1998-05-15
                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                       FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                               APPLICATION
                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                  APPLICATION
                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 6: FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION
                                                                                                    APPLICATION
                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                        : 1998-05-15
NUMBER: 60/
                                                                                                    NUMBER:
                                                                                                                              NUMBER:
                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER:
                                                                                                                                                                                                                       NUMBER: 60/085689
1998-05-15
                                                           1998-05-18
                                                                                                                 1998-05-15
                                                                                                                                                                       1998-05-15
                                                                                                                                                                                                1998-05-15
                                                                                                                                                                                                                                                    1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           998-05-06
                                                                                                                                                                                                                                                                              : 60/085582
)5-15
                                                                         60/086023
                                                                                                 60/085697
                                                                                                                                                                                                            60/085579
                                                                                                                                                                                                                                                                  60/085700
                                                                                                                                                                                                                                                                                                                                                60/085338
                                                                                                                                                                                                                                                                                                                                                                      60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                              60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/084598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/084366
                                                                                                                            60/085704
                                                                                                                                                       60/085573
                                                                                                                                                                                  60/085580
                                                                                                                                                                                                                                                                                                                                                                                                   60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084640
                                                                                                                                                                                                                                                                                                                     60/085323
                  Score 1032; DB 34;
Pred. No. 9.5e-288;
```

Дb γQ 밁 ΩV В Š B δÃ 밁 QY Matches 301 374 241 314 181 254 121 194 134 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 67 1 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg | aagtggtgeetggateetcegegtggteettetgageaacaceceaaacgeagtacageate aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120 aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac gctatggacaacgtgacggtccggcaggggggggggcgccaccctcaggtgcactattgac gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa Mismatches 0 Indels 0; Gaps 193 433 373 253 60 360 300 313 180

493

DB 34;

Length 1679;

```
US-09-978-188A-522
(Sequence 522, Application US, GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi APPLICANT: Baker Kevin P. APPLICANT: Botstein, David APPLICANT: Desnoyers, Luc APPLICANT: Desnoyers, Luc APPLICANT: Eaton, Dan APPLICANT: Filvaroff, Ellen APPLICANT: Filvaroff, Ellen APPLICANT: Gao, Wei-Qiang APPLICANT: Gao, Wei-Qiang APPLICANT: Gerber, Hanspeter APPLICANT: Gerber, Hanspeter APPLICANT: Gerber, Marv F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DЬ
                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
 APPLICANT:
                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tgcagtgcctccaatgacgtggccgcgcgcccgtggtacggagagtaaaggtcaacgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                        cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcqaggtgagc 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ctgcagtgtgaagcotcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tatccaccatacatttcagaagccaagggtaccaggtgtcccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aacggcacgtcgaggagggcaggctgcgtctggctgcctcttctggtcttgcacctg 1153
                                  Kuo,
                                                Gurney, Austin L. Hillan, Kenneth J Kljavin, Ivar J.
                                                                                                       Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                        Gerber, Hanspeter
Gerritsen, Mary E.
                                                                                                                                         Goddard,
Napier, Mary A. Pan, James;
                                                                                                                                                                                                                                                                                                                                                                 Application US/09978188A
                                  Sophia S.
                                                                                                                                         Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/077641
PRIOR FILLING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077791
PRIOR APPLICATION NUMBER: 60/077791
PRIOR APPLICATION NUMBER: 60/0778014
PRIOR APPLICATION NUMBER: 60/078004
PRIOR APPLICATION NUMBER: 60/078004
PRIOR APPLICATION NUMBER: 60/078086
PRIOR APPLICATION NUMBER: 60/078086
PRIOR APPLICATION NUMBER: 60/078036
PRIOR APPLICATION NUMBER: 60/078036
PRIOR FILLING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078036
PRIOR FILLING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/078910
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078939
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079294
PRIOR FILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Secreted and Transmembrane
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C8
                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/064249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/918585 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/978,188A
FILING DATE: APPLICATION
                                  APPLICATION NUMBER: 60/080328
                                                  FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/
FILING DATE: 1998-04-01
                                                                                                       FILING DATE:
APPLICATION N
                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-03
                                                                                                                                                                                                                           FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                              FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                    APPLICATION
                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/079663
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/
FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/079656 FILING DATE: 1998-03-26
                                                                                                                                         APPLICATION
                                                                                                                                                          FILING DATE:
                                                                                                                                                                            APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wood,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                William
 NUMBER:
                                                                                                       NUMBER: 60/080194
                                                                                                                                         NUMBER: 60/080165
                                                                                                                                                                          NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Daniel
                  1998-04-01
                                                                                                                                                          1998-03-31
                                                                                                                                                                                                                                                                                                                                  1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , Timothy A.
                                                                                                                           1998-03-31
                                                                                                                                                                                            1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001-10-15
                                                                      60/080327
                                                                                                                                                                                                              60/080105
                                                                                                                                                                                                                                                                                                                  60/079786
                                                                                                                                                                                                                                                                                                                                                    60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                       60/079689
                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polypeptides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic
```

```
PRIOR PRIOR
                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                            PRIOR PRIOR
                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                          APPLICATION NUMBER: FILING DATE: 1998-05
                                                                                                                                   APPLICATION NUMBER: 60/
                                                                                                                                                                FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083742
                                                                                                                                                                                                               APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/083499
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083545
                                                                                         FILING DATE: 1998-05-06
                                                                                                                                                                                APPLICATION NUMBER: 60/083500 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/083554 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-23
APPLICATION NUMBER: 60/083336
FILING DATE: 1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
                                                                                                       APPLICATION NUMBER: 60/084414
                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/083495 FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082804
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/081838 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/081817
FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/081229 FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/081049
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081071
FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/081070 FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/080334
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
1998-05-07
                     жимвЕR: 60/084637
1998-05-07
                                                           1998-05-06
                                                                                                                      1998-05-05
                                                                                                                                                                                                                                                                                                           1998-04-29
                                                                                                                                                                                                                                                                                                                                                                     1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-01
                                                                                                                                                                                                                               60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/082797
                                                                        60/084441
                                                                                                                                    60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/081955
```

```
QΥ
                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                    B
                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILING DATE: 1998-05-13
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085338
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085582
PRIOR APPLICATION NUMBER: 60/085582
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085700
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085700
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/C
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/C
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/084640
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084598
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084627
PRIOR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 1032; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60
PRIOR FILING DATE: 1998-05-1
PRIOR APPLICATION NUMBER: 60
                                                                                                                                                                    494
                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       194
                                                                                                                                                                                      361 aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085697
FILING DATE: 1998-05-15
99tagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg 540
                                                              atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaact
                                                                                       atttetteagatateteeattaatgaagggaacaatattageeteacetgcatageaact 480
                                                                                                                                                             aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                            aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                           aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1032; DB 36;
Pred. No. 9.5e-288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1679;
```

; Gaps

0

613

```
RESULT 6
US-09-978-189-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 522,
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                       APPLICANT: APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                       APPLICANT: APPLICANT:
                           TITLE OF INVENTION: Secreted and Transmembrane Polypeptides TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C7
CURRENT APPLICATION NUMBER: US/09/978,189
CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                      APPLICANT:
                                                                                                                            APPLICANT:
                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atcttcttcaatgtctctgaacatgactatggggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         agactgattgaaggaaaggaggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tatccaccatacatttcagaagccaagggtacaggtgtccccgtggggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aacggcacgtcgaggagggcaggctgcgtctggctgctctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ctgggccacaccaatgccagcatcatgctatttggtccagggcgcgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ashkenazi, Avi
                                                                                                         Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                    Gurney,
                                                                      Wood, William I.
                                                                                Williams, P. Mickey
                                                                                                                                                                                                                                                  Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                              Gerritsen, Mary E. Goddard, Audrey
                                                                                                                                                                                                                                                                                                             Gerber,
                                                                                                                                                                                                                                                                                                                           Gao,
                                                                                                 Tumas,
                                                                                                                                                      Paoni,
                                                                                                                                                                                                                                                                                                                                      Fong,
                                                                                                                                                                                                                                                                                                                                                      Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                    Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                 Eaton,
                                                                                                                                                                                                                                                                                                                                                                                                            Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                       Baker Kevin
                                                                                                                                                                                                Kuo,
                                                                                                                                                                                                            Kljavin,
                                                                                                                                                                                                                         Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers, Luc
                                                                                                                                                                                  Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09978189
                                                                                                                                                                     James;
                                                                                                                                                                                            Sophia S.
                                                                                                                                                                                                                                                                                                                          Wei-Qiang
                                                                                                                                                                                                                                                                                                                                        Sherman
                                                                                                Daniel
                                                                                                                                                     Nicholas F.
                                                                                                                                                                                                                      Austin L.
                                                                                                                                                                                                                                                                                                                                                                                 Dan
                                                                                                                                                                             Mary A.
                                                                                                                                                                                                                                                                                                             Hanspeter
                                                                                                                                                                                                            Ivar J.
                                                                                                                                                                                                                                                                                                                                                                    Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                         יסי
                                                      and
                                                    Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
```

```
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
PRIOR
                                                     PRIOR PRIOR
                                                                                 PRIOR
PRIOR
                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                     FILING DATE: 1998-0:
APPLICATION NUMBER:
FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079786
FILING DATE: 1998-03-27
             APPLICATION NUMBER: 60/081195
FILING DATE: 1998-04-08
                                        FILING DATE: 1998-04
APPLICATION NUMBER:
FILING DATE: 1998-04
                                                                                               FILING DATE:
                                                                                                                         APPLICATION NUMBER: 60/080334 FILING DATE: 1998-04-01
                                                                                                                                                     APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01
                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                           APPLICATION NUMBER: 60/080327 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079663
FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/079294 FILING DATE: 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/078939 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/078886 FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60 FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 1998-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/077632 FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/066364 FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/064249 FILING DATE: 1997-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/062250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 2001-07
                                                                               APPLICATION NUMBER: 60/081049
                                                                                                         APPLICATION NUMBER: 60/081070
                                                                                                                        FILING DATE:
                                                                                                                                                                                 FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/079689 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : 1998-03-12
NUMBER: 60/077791
NUMBER:
                                                                                              1998-04-08
                                          1998-04-08
                                                                    1998-04-08
                                                                                                                                                                                                                                        1998-03-31
                                                                                                                                                                                                                                                                1998-03-31
                                                                                                                                                                                                                                                                                             1998-03-31
                                                                                                                                                                                                                                                                                                                                                   1998-03-30
                                                                                                                                                                                                                                                                                                                                                                               1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1997-10-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001-07-30
 60/081203
                                                     60/081071
                                                                                                                                                                                              60/080328
                                                                                                                                                                                                                                                   60/080194
                                                                                                                                                                                                                                                                                                                                                                60/079923
                                                                                                                                                                                                                                                                                                                                                                                            60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/065311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09/918585
```

1998-04-09

```
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR PRIOR
                                                                               PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                 PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OR APPLICATION NUMBER: 6) FILING DATE: 1998-04-
PR APPLICATION NUMBER: 6
PR FILING DATE: 1998-04-
PR APPLICATION NUMBER: 6
PR APPLICATION NUMBER: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-29
DR APPLICATION UMBER: 60/08
DR FILING DATE: 1998-04-29
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-29
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-29
DR FILING DATE: 1998-04-29
DR FILING DATE: 1998-04-29
DR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                       R APPLICATION NUMBER: 6
R FILING DATE: 1998-04
R APPLICATION NUMBER: 6
R FILING DATE: 1998-04
R APPLICATION NUMBER: 6
R APPLICATION NUMBER: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R FILING DATE: 1998-04-22
R APPLICATION NUMBER: 60,
R APPLICATION NUMBER: 60,
R FILING DATE: 1998-04-22
R FILING DATE: 1998-04-22
R APPLICATION NUMBER: 60,
R FILING DATE: 1998-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R FILING DATE:
R APPLICATION |
R FILING DATE:
R APPLICATION |
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R APPLICATION NUR FILING DATE: 1
R APPLICATION NUR APPLICATION NUR PILING DATE: 1
                                                                                                                                           R FILING DATE:
R APPLICATION N
R FILING DATE:
R APPLICATION N
R APPLICATION N
R FILING DATE:
R APPLICATION N
R FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-06
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-0.
APPLICATION NUMBER:
FILING DATE: 1998-0.
                                                                                                                                                                                                                                                 FILING
                                                                                                                                                                                                                                                                                             APPLICATION FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 1998-0
                                                                               APPLICATION FILING DATE:
                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                   DATE:
                                                                                                                                                                                                                                                                                               DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N NUMBER: 60
E: 1998-04-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                               NUMBER: 60/084627
: 1998-05-07
                                                                                                                                                                 NUMBER: 60/084598: 1998-05-07
                                                              NUMBER:
                                                                                                                         NUMBER: 60/084600: 1998-5-07
                                                                                                                                                                                                                                 NUMBER:
                                                                                                                                                                                                                                                                         NUMBER:
                                                                                                                                                                                                                                                                                                                   NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-15
                                                                                                                                                                                                             1998-05-
                                                                                                                                                                                                                                                     1998-05-07
                                                                                                                                                                                                                                                                                               1998-05-07
                                       1998-05-07
                                                                                                                                                                                                             60/084640
5-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/081952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/082796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/082704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/082700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/082804
                      60/085339
                                                              60/084643
                                                                                                                                                                                                                                                                           60/084639
                                                                                                                                                                                                                                                                                                                      60/084637
                                                                                                                                                                                                                                                                                                                                                           60/084441
                                                                                                                                                                                                                                                                                                                                                                                                     60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                               60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29
```

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
       QΥ
                                  DЬ
                                                        Qy
                                                                                  Вþ
                                                                                                        8
                                                                                                                                   밁
                                                                                                                                                         δÃ
                                                                                                                                                                                  뫄
                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                        ΔÃ
                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                         ΩV
                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                         QУ
                                                                                                                                                                                                                                                                                                                                                                                   β
                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                   434
                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                   314
                                                                                                                                                                                                                                                                                                                                                                                                                                   254
                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134
                                 734
                                                          601
                                                                                  674
                                                                                                          541
                                                                                                                                   614
                                                                                                                                                           481
                                                                                                                                                                                   554
                                                                                                                                                                                                           421
                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OR APPLICATION NUMBER: 60/085573
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085704
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085697
OR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION |
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION | FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                             aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                           aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                             gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032;
                                                                                              agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagggggactacgag
                                                                                                                                           ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                 atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                              atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                tatccaccatacatttcagaagccaagggtaccaggtgtccccgtgggacaaaaggggaca
                                             tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac
                                                                                 agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                 ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                   aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER: 60/085573: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER: 60/085580: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER: 60/085689: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER: 60/0: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER: 60/
: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1032; DB 36;
Pred. No. 9.5e-288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1679;
```

253 120

180

0; Gaps

0

794

tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca

600 673 540 613 480 553 420 493 360 433 300 373 240

60/078910 60/078936

60/079294 60/078939

60/079728 60/079663 60/079689 60/077649

60/077632

```
RESULT /
US-09-978-191A-522
US-09-978-191A-522
US-09-978-191A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                          PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR TILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR TILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL
                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
APPLICANT: Botstein, Dav
                                                                                                                                                                                                                                                                                                                                   APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/9: CURRENT FILING DATE: 2001-10-15 PRIOR APPLICATION UNMBER: 09/91855 PRIOR FILING DATE: 2001-07-30
                                                                                                                                                                                                               TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C4
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1154 cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    914 agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION | FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aacggcacgtcgaggagggcaggctgcgtcttggctgctcttcttggtcttctcacctg 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgggccacaccaatgccagcatcatgctatttggtccagggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atettetteaatgtetetgaacatgaetatgggaactacaettgegtggeeteeaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION:
                                                                                                                                                                                                APPLICATION NUMBER: US/09/978,191A
                                                                                                                                                                                                                                                   Williams, P. Mic. Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                           Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gao,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eaton, Da
Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                   Shelton, David L. Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerber,
                                                                                                                                                                                                                                                                                        Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                 Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                            Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Goddard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Botstein, David
Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                    Roy, Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                Pan, James;
                                                                                                                                                                                                                                                                                                                                                                              Napier,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09978191A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                             Sophia S.
 NUMBER: 60/077450: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dan
                                                                                                                                                                                                                                                                                                                                                  Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hanspeter
                                                                                                                                                                                                                                                                                                                                                                              Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Napoleon
                                                                                                                                                                                                                                                                         P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ellen
                                                                                                                                                                                                                                            Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OR FILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/079786
OR FILING DATE: 1998-03-27
OR APPLICATION NUMBER: 60/079920
OR FILING DATE: 1998-03-30
OR APPLICATION NUMBER: 60/079923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OR FILING DATE: 1998-03-31

R APPLICATION NUMBER: 60/08

R FILING DATE: 1998-03-31

OR APPLICATION NUMBER: 60/08

OR FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OR FILING DATE: 1998-03-20
REAPPLICATION NUMBER: 60/07
REFILING DATE: 1998-03-20
OR APPLICATION NUMBER: 60/07
REFILING DATE: 1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                         OR FILING DATE: 1998-03-31
RE APPLICATION NUMBER: 60/0
RE FILING DATE: 1998-03-31
DR FILING DATE: 1998-03-07
DR FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/079656
FILING DATE: 1998-03-26
APPLICATION NUMBER: 60/079664
FILING DATE: 1998-03-27
                                                                                                                                                                                             FILING DATE: 1998-0. APPLICATION NUMBER: FILING DATE: 1998-0.
                                                                                                                                                                                                                                        APPLICATION NUMBER:
FILING DATE: 1998-0
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 1998-0-APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-03 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-03-20 APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-03 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/078004
FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/077791 FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-03
          FILING DATE: 1998-0. APPLICATION NUMBER: FILING DATE: 1998-0.
                                                                                   FILING DATE: 1998-04
APPLICATION NUMBER:
                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                               APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                      FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                     FILING DATE:
                                                      APPLICATION NUMBER:
                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DATE:
NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-1
                                                                                                                                     1998-04-09
                                                                                                                                                                                                1998-04-08
                                                                                                                                                                                                                                                          1998-04-08
                                                                                                                                                                                                                                                                                                                                                 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-03-20
              1998-04-1
                                                                                                       1998-04-
                                                                                                                                                                                                                                                                                                                    1998-04-01
                                                                                                                                                                                                                                                                                                                                                                              1998-04-01
                                          1998-04-15
                                                                                                                                                                                                                              1998-04-08
                                                                                                                                                                                                                                                                                        1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-
```

60/080327

60/080328

60/080194 60/080165 60/080107

60/080334 60/080333

60/081070

60/081955 60/081229

60/081952 60/081819 60/081817 60/081195

60/081203

60/081071 60/081049

```
OR APPLICATION NUMBER: 60/083496
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083499
OR APPLICATION NUMBER: 60/083545
OR APPLICATION NUMBER: 60/083545
OR APPLICATION NUMBER: 60/08354
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OR APPLICATION NUMBER: 60/082804
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082700
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082797
OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/082796
OR APPLICATION NUMBER: 60/08336
OR FILING DATE: 1998-04-23
OR FILING DATE: 1998-04-27
OR FILING DATE: 1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DR APPLICATION NUMBER: 60/08
BR FILING DATE: 1998-04-29
BR APPLICATION NUMBER: 60/08
BR FILING DATE: 1998-04-29
BR APPLICATION NUMBER: 60/08
BR FILING DATE: 1998-04-30
BR FILING DATE: 1998-05-05
BR FILING DATE: 1998-05-05
BR FILING DATE: 1998-05-06
BR APPLICATION NUMBER: 60/08
BR APPLICATION NUMBER: 60/08
BR APPLICATION NUMBER: 60/08
BR APPLICATION NUMBER: 60/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R FILING DATE: 1998-04-
RR FILING DATE: 1998-04-
RR FILING DATE: 1998-04-
RR APPLICATION NUMBER: 6
RR APPLICATION NUMBER: 6
RR APPLICATION NUMBER: 6
RR FILING DATE: 1998-04-
RR FILING DATE: 1998-04-
                                                                                                                                                                                                                                                                                    OF APPLICATION NUMBER: 60/08
OF FILLING DATE: 1998-05-07
OF APPLICATION NUMBER: 60/08
OF FILLING DATE: 1998-05-07
OF APPLICATION NUMBER: 60/08
OF FILLING DATE: 1998-05-07
OF APPLICATION NUMBER: 60/08
OF FILLING DATE: 1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R APPLICATION NUMBER: (R FILING DATE: 1998-05- (R APPLICATION NUMBER: (R FILING DATE: 1998-05- (R APPLICATION NUMBER: (R APPLICATION NUMB
                                           R FILING DATE:
R APPLICATION N
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/1
FILING DATE: 1998-04-28
APPLICATION NUMBER: 60/1
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                   APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 1998-05
APPLICATION FILING DATE:
                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                             NUMBER: 60
                      NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        мумьек: 60/084639
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER: 60/084598
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER: 60/084637
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-04-21
                                                                                                1998-05-
                                                                                                                                             1998-05
                                                                                                                                                                                           1998-05-
                                                                                                                                                                                                                                           1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-04-15
  1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/082704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/082569
                      60/085579
                                                                      60/085689
                                                                                                                       60/085700
                                                                                                                                                                    60/085582
                                                                                                                                                                                                                    60/085323
                                                                                                                                                                                                                                                                  60/085338
                                                                                                                                                                                                                                                                                                               60/085339
                                                                                                                                                                                                                                                                                                                                                                60/084643
                                                                                                                                                                                                                                                                                                                                                                                                           60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               돲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                            δÃ
                                                                                                               D
                                                                                                                                                             QΥ
                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                             Вр
                                                                                                                                                                                                                                                                                                                                                        γQ
                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                      974
                                                                 841
                                                                                                               914
                                                                                                                                                                                                               854
                                                                                                                                                                                                                                                                                                                                                                                                           734
                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OR APPLICATION NUMBER: 60/085580
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085573
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085704
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085697
OR FILING DATE: 1998-05-15
                                                                                                                                                             781
                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                             794
                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ,_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \verb|aaccgggtcaccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gctatggacaacgtgacggtccggcaggggggggggcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1032;
                 atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                     atcttctcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                 ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                 tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                    tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                             ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                          tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                     tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
```

613 480 553 420 493 360 433 300 373 240 313 180

PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR

1033

900

973 840 913 780 853 720 793 660 733 600 673 540 PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

PRIOR PRIOR PRIOR

PRIOR

PRIOR

PRIOR

atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacgggggtt atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg Score 1032; DB 36; Pred. No. 9.5e-288; Mismatches 0; Length 1679; 0; Gaps 120 193 60 0;

```
SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QY
                                                                                                                                                                                                                    CURRENT APLICATION NUMBER: US/09/978,192
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/066364
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/078004
PRIOR FILING DATE: 1998-03-13
PRIOR APPLICATION NUMBER: 60/078886
PRIOR FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 522, Application US/09978192 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -09-978-192-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION UNMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
                                                                                                            PRIOR FILING DATE: 1998-03-11 PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                           PRIOR APPLICATION NUMBER: 60/077641 PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1034 ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcqaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttcttggtcttgcacctg 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aacggcacgtcgaggagggcaggctgctgctgtctggctcttcttggtcttttgcacctt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kuo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roy, Margaret Ann
Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ferrara, Napoleon Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          שי
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                             PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                   OR APPLICATION NUMBER: 60/081071
OR FILLING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081195
OR FILLING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/081203
OR FILLING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081229
OR FILLING DATE: 1998-04-09
OR APPLICATION NUMBER: 60/081955
OR APPLICATION NUMBER: 60/081955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-03-30
APPLICATION NUMBER: 60/079923
FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1998-03-27
APPLICATION NUMBER: 60/079728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-03-25
APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/080334
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/081070
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080327
FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 1998-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/080105
 FILING DATE: APPLICATION
               APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22
                                              APPLICATION NUMBER: FILING DATE: 1998-0
                                                                              FILING DATE: 1998-04-22
                                                                                                            APPLICATION NUMBER: 6 FILING DATE: 1998-04-
                                                                                                                                         APPLICATION NUMBER: 60/
FILING DATE: 1998-04-21
                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                      FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081838
                                                                                                                                                                                                                     FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081952
                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                        1998-04-15
                                                                                                                                                                                                                                                                                                      1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-03-
                                                                                                                                                                          1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-
                                             1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/079294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/079663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/078939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/078910
                                                                                                                           60/082569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/079786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/079689
 60/082797
                                                               60/082804
                                                                                             60/082704
                                                                                                                                                           60/082568
                                                                                                                                                                                                                                                                                        60/081817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/079920
```

193

60

120 253

180

433

300

360 493 313 240 373

```
Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 1032; Conservative 0
                                                                                                                                                                            PRIOR

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
                                                                                                                                     PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OR APPLICATION NUMBER: 60/084639
OR FILLING DATE: 1998-05-07
OR APPLICATION UNBER: 60/084640
OR FILLING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084598
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084600
OR FILING DATE: 1998-5-07
OR APPLICATION NUMBER: 60/084627
OR APPLICATION NUMBER: 60/084643
OR APPLICATION NUMBER: 60/084643
OR FILLING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084643
OR FILLING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084643
OR FILLING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-23
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-27
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                               OR APPLICATION NUMBER: 60/085339
OR FILING DATE: 1998-05-13
OR PAPPLICATION NUMBER: 60/08538
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085323
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085582
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085700
OR APPLICATION NUMBER: 60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OR APPLICATION NUMBER:

OR FILING DATE: 1998-04

OR APPLICATION NUMBER:

OR FILING DATE: 1998-04

OR FILING DATE: 1998-04

OR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R APPLICATION NUMBER: 60,
R FILING DATE: 1998-04-22
R APPLICATION NUMBER: 60,
R FILING DATE: 1998-04-33
R APPLICATION NUMBER: 60,
R FILING DATE: 1998-05-03
                                                                                              R FILING DATE: 1998-05
R APPLICATION NUMBER: 1
R FILING DATE: 1998-05
R APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R APPLICATION NUR FILING DATE: 1
R APPLICATION NUR FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/084441 FILING DATE: 1998-05-06 APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                          FILING DATE: 1998-0
APPLICATION NUMBER:
FILING DATE: 1998-0
                                                                                                                                                                                                                 FILING DATE: 1998-0 APPLICATION NUMBER:
                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/085579 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/084414
FILING DATE: 1998-05-06
                                                                             FILING
                                                                                                                                                                              APPLICATION
                                                                                                                                                                                                  FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING
                                                                                                                                                                                                DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER:
                                                                                                NUMBER:
                                                                                                                                                                            NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER: 60/084639
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-29
                                                                                                                                                                                                                                                                                                                   1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-29
                                                                             1998-05-15
                                                                                                                                                           1998-05-
                                                                                                                                                                                                  1998-05-
                                                                                                                                                                                                                                                                            1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-22
                                                                                                                  1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083500
14-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/083499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/083495
                                                                                                                                                                                                                   60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/082796
                                                                                                60/085697
                                                                                                                                       60/085704
                                                                                                                                                                              60/085573
                                                                                                                                                                                                                                                                                                 60/085689
  0;
Score 1032; DB 36;
Pred. No. 9.5e-288;
Mismatches 0;
  Indels
                                    Length
                                         1679;
  0
  Gaps
  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ϋ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                    쉱
                                                   δõ
                                                                                            В
                                                                                                                                 Ωy
                                                                                                                                                                            망
                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                    1154
                                                       1021
                                                                                              1094
                                                                                                                                   961
                                                                                                                                                                            1034
                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                        974
                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                   914
                                                                                                                                                                                                                                                                                                                                                                                                                 854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134
                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         سو
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                          agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ggtagaccagagcctacggttacttggagacacatctctcccaaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageacet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaccacccaaagacctotagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aagtggttgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                    cttctcaaattt
                                      cttctcaaattt
                                                                                                                                                                                              ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tycagtycctccaatgacytygocycyccytygtacygagagtaaagytcaccytyaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                               agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                               ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                       1032
```

420 553 480 613 540 673

1153

1020

1093

960

1033

60/079786 3-27

```
US-09-978-192A-522; Sequence 522, Applic; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILLING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILLING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/066364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/978,192A CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                        PRIOR
                                                                                                       PRIOR
                                                                                                                                          PRIOR
PRIOR
                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                        PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/0PRIOR FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PPLICANT:
                                   FILING DATE: 1998-03-25
APPLICATION NUMBER: 60/0
FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/
FILING DATE: 1998-03-11
                                                                                                                                          APPLICATION NUMBER: FILING DATE: 1998-03
                                                                                                                                                                                             FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                 APPLICATION NUMBER: 60/
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                  FILING DATE: 1998-03-12
APPLICATION NUMBER: 60/078004
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 1998-03
                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/
FILING DATE: 1998-03-11
 FILING DATE: 1998-03-27
                      APPLICATION
                                                                                        APPLICATION NUMBER:
                                                                                                       FILING DATE: 1998-03-20
                                                                                                                         APPLICATION NUMBER: 60/078939
                                                                                                                                                                              FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                       FILING DATE: 1998-03-13
                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fong, Diversity Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumas, Daniel Williams, P. Mickey Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shelton, David L. Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kljavin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gurney, Austin L.
Hillan, Kenneth J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Baker Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09978192A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Margaret Ann
ton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sophia S.
                    NUMBER: 60/079664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nicholas F
                                                                                                                                          1998-03-20
                                                                                                                                                                                                                                                                                                                          1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ellen
                                                    60/079656
                                                                                    60/079294
                                                                                                                                                           60/078910
                                                                                                                                                                                               60/078936
                                                                                                                                                                                                                                  60/078886
                                                                                                                                                                                                                                                                                                          60/077791
                                                                                                                                                                                                                                                                                                                                           60/077649
                                                                                                                                                                                                                                                                                                                                                                               60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                 60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/077450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079728
PRIOR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                    PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                              PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-03-31 PRIOR APPLICATION NUMBER: 60/080165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/079920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079663
                                                                                                                                          PRIOR PRIOR
                                                                                                                                                                                             PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/079689
                                                                       PRIOR
                                                                                                                                                                                                                                  PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/081070
                                                                                                                                                                                                                                                     PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-04-08
                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/080328 FILING DATE: 1998-04-01
                                                                 APPLICATION NUMBER:
                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/
FILING DATE: 1998-04-22
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/082569
                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/082568
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/081838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/081229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-04-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/081071
FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/080334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-04-01
APPLICATION NUMBER: 60/080333
FILING DATE: 1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/080194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/080105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/079923
                                                                                                   APPLICATION NUMBER:
                                                                                                                       APPLICATION NUMBER: 60/083336 FILING DATE: 1998-04-27
                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/081819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-04-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                    FILING DATE:
                                                                                                                                                           FILING DATE:
                                   APPLICATION NUMBER: 60/083495
                  LING DATE:
                                                                                                                                                                                                                                                                                                                                                                               LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATE:
NUMBER: 60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-03-
                                                    1998-04-29
                                                                                                                                                                                                                                                                                                                                                                               1998-04-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-09
                                                                                        1998-04-28
                                                                                                                                                           1998-04-23
                                                                                                                                                                                               1998-04-22
                    1998-04-29
```

60/081817

60/081955

60/081952

60/083392

60/083322

60/082796

60/082797

60/082804 60/082704

```
Вþ
                                                                                                         Qy
                                                                                                                                                                                δÃ.
 밁
                                 QΥ
                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                               Query
                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R FILING DATE: 1998-04:
R APPLICATION NUMBER: (
R FILING DATE: 1998-04:
R APPLICATION NUMBER: (
R APPL
 254
                                     121
                                                                         194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R FILING DATE:
R APPLICATION PRICES OF STREET
                                                                                                                                                  134
                                                                                                                                                                                                                            Local Similarity
nes 1032; Conserv
                                                                                                             62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/083558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                        μ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                   R APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/084600 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-05
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-0: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085689 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/085339 FILING DATE: 1998-05-13 APPLICATION NUMBER: 60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/084598 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/0
APPLICATION NUMBER: 60/0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-05-
APPLICATION NUMBER: 6
FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING
                                                                                                                                                atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                                                                                                    atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                           gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                       gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DATE:
                                                                                                                                                                                                                                                                                                       DATE:
                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER: 60/083545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : 1998-04-29
NUMBER: 60/083499
                                                                                                                                                                                                                                                                                                                         NUMBER: 60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER: 60/084643
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-05-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998-04-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-04-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-13
                                                                                                                                                                                                                                                                                                           1998-05-15
                                                                                                                                                                                                                                                                                                                                             1998-05-
                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/084414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/083742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/083500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/084441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/085579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085323
                                                                                                                                                                                                                                                                                                                                                                                                    60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                        60/085580
                                                                                                                                                                                                                                                                                                                                                             60/085704
                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                              Score 1032; DB 36;
Pred. No. 9.5e-288;
; Mismatches 0;
                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                         1679;
                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                60
         313
                                             180
                                                                               253
                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ρŞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              δð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                             80
                                                                               ; Sequence 522, Applica:
GENERAL INFORMATION:
APPLICANT: Ashkenazi:
APPLICANT: Baker Ke
APPLICANT: Botstein
                                                                                                                                                                            RESULT 10
US-09-978-193A-522
                           APPLICANT:
APPLICANT:
APPLICANT:
           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
```

Ashkenazi, Avi

Application US/09978193A

Botstein, David Baker Kevin

Luc סי

Filvaroff, Ellen

Eaton, Dan Desnoyers,

```
181
1154
                             1021
                                                           1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614 ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                     1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                   734
                                                                                        961
                                                                                                                                                    901
                                                                                                                                                                                   974
                                                                                                                                                                                                              841
                                                                                                                                                                                                                                             914
                                                                                                                                                                                                                                                                                                          854
                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                      794
                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        {\tt aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                atottottoaatgtototgaacatgactatgggaactacacttgcgtggcotccaacaag
                                                                                                                                                                                                                                                                                                                                                                 tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                   tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                               tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agtgaagacqaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                          agactgattgaaggaaagaaagggtgaaagtggaaaacagacctttcctctcaaaactc 840
                                                                                                                                                                                                                                                                                                       ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                       ctgoagtgtgaagcotcagcagtcocctcagcagaattccagtggtacaaaggatgacaaa 780
                                                      agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                    ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                  ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                              atottottcaatgtototgaacatgactatgggaactacacttgcgtggcotocaacaag
cttctcaaattt 1165
                           cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                    913
                                                                                                                                                                                                                                                                                                                                                                                853
                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                             793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                613
                                                                                                1020
                                                                                                                                                                                           1033
                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                       973
                                                                   1153
                                                                                                                               1093
                                                                                                                                                            960
```

PRIOR APPLICATION NUMBER: 60/07964 PRIOR FILING DATE: 1998-03-27 PRIOR APPLICATION NUMBER: 60/079689 PRIOR APPLICATION NUMBER: 60/079663 PRIOR FILING DATE: 1998-03-27 PRIOR PILING DATE: 1998-03-27 PRIOR PILING DATE: 1998-03-27 PRIOR APPLICATION NUMBER: 60/079786 PRIOR APPLICATION NUMBER: 60/079786 PRIOR APPLICATION NUMBER: 60/079786 PRIOR FILING DATE: 1998-03-27 PRIOR APPLICATION NUMBER: 60/079920 PRIOR FILING DATE: 1998-03-30 PRIOR APPLICATION NUMBER: 60/079923 PRIOR APPLICATION NUMBER: 60/079923 PRIOR APPLICATION NUMBER: 60/079923 PRIOR APPLICATION NUMBER: 60/079923	FILING DATE: 1998-03 APPLICATION NUMBER: FILING DATE: 1998-03	APPLICATION N ETILING DATE: AP	APPLICANT: Williams, P. Mickey APPLICANT: Wood, William I. TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same TITLE OF INVENTION INMEBR: US/09/978,193A CURRENT APPLICATION NUMBER: US/09/978,193A CURRENT FILING DATE: 2002-02-21 PRIOR APPLICATION NUMBER: 09/918585 PRIOR APPLICATION NUMBER: 09/918585 PRIOR APPLICATION NUMBER: 60/062250 PRIOR APPLICATION NUMBER: 60/064249 PRIOR APPLICATION NUMBER: 50/064249 PRIOR APPLICATION NUMBER: 50/064249	APPLICANT: Fong, Sherman APPLICANT: Gao, Wei-Qiang APPLICANT: Gerber, Hanspeter APPLICANT: Gertber, Hanspeter APPLICANT: Goddard, Audrey APPLICANT: Goddwski, Paul J. APPLICANT: Grimaldi, J. Christopher APPLICANT: Grimaldi, J. Christopher APPLICANT: Grimaldi, J. Christopher APPLICANT: Hillan, Kenneth J APPLICANT: Kljavin, Ivar J. APPLICANT: Kuo, Sophia S. APPLICANT: Napier, Mary A. APPLICANT: Paoni, Nicholas F. APPLICANT: Paoni, Nicholas F. APPLICANT: Paoni, Nicholas F. APPLICANT: Roy, Margaret Ann APPLICANT: Stewart, Timothy A. APPLICANT: Stewart, Timothy A. APPLICANT: Tumas, Daniel
APPLICATION FILLING DATE: APPLICATION FILLING DATE: APPLICATION FILLING DATE: APPLICATION IFILING DATE:	PRIOR APPLICATION NUMBER: 00/002/00 PRIOR PRIOR TILINO DATE: 1998-04-22 PRIOR PELINO DATE: 1998-04-22 PRIOR APPLICATION NUMBER: 60/082797 PRIOR APPLICATION NUMBER: 60/082796 PRIOR FILING DATE: 1998-04-23 PRIOR APPLICATION NUMBER: 60/083336 PRIOR APPLICATION NUMBER: 60/083322 PRIOR APPLICATION NUMBER: 60/083322 PRIOR APPLICATION NUMBER: 60/083322 PRIOR APPLICATION NUMBER: 60/083392 PRIOR APPLICATION NUMBER: 60/083495 PRIOR PRIOR PRIOR NUMBER: 60/083495 PRIOR PRIOR PRIOR PRIOR NUMBER: 60/083495	APPLICATION NUMBER: FILING DATE: 1998-04 APPLICATION NUMBER:	FILING APPLICA APPLICA FILING FILING FILING APPLICA FILING APPLICA FILING APPLICA FILING APPLICA FILING APPLICA	PRIOR APPLICATION NUMBER: 60/080105 PRIOR ETLING DATE: 1998-03-31 PRIOR ETLING DATE: 1998-03-31 PRIOR FILING DATE: 1998-03-31 PRIOR APPLICATION UNMBER: 60/080165 PRIOR APPLICATION UNMBER: 60/080194 PRIOR FILING DATE: 1998-03-31 PRIOR FILING DATE: 1998-03-31 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080328 PRIOR APPLICATION NUMBER: 60/080328 PRIOR APPLICATION NUMBER: 60/080333 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/080334 PRIOR APPLICATION NUMBER: 60/080334 PRIOR APPLICATION NUMBER: 60/0801070 PRIOR APPLICATION NUMBER: 60/081070 PRIOR FILING DATE: 1998-04-01 PRIOR FILING DATE: 1998-04-01 PRIOR APPLICATION NUMBER: 60/081070 PRIOR FILING DATE: 1998-04-01 PRIOR FILING DATE: 1998-04-08 PRIOR FILING DATE: 1998-04-08

```
βÃ
                                                                                                                                  8
                                                                                                                                                                Db
                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/084
PRIOR APPLICATION NUMBER: 60/084
PRIOR APPLICATION NUMBER: 60/084
PRIOR APPLICATION NUMBER: 60/084
PRIOR APPLICATION NUMBER: 60/085
                       Qy
                                                    Вþ
                                                                              δõ
                                                                                                         B
밁
                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 1032; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OR APPLICATION UMBER: 60/084414
OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084441
OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084637
OR FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084640
OR FILING DATE: 1998-05-07
OR FILING DATE: 1998-05-07
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084600
OR APPLICATION NUMBER: 60/084607
OR APPLICATION NUMBER: 60/084627
OR FILING DATE: 1998-05-07
OR FILING DATE: 1998-05-07
                                                                                                                                                                                                                         194
                                                                                                                                                                                                                                                                             134
 434
                           301
                                                     374
                                                                                                            314
                                                                                                                                     181
                                                                                                                                                                  254
                                                                                                                                                                                             121
                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083742
FILING DATE: 1998-04-30
APPLICATION NUMBER: 60/084366
FILING DATE: 1998-05-05
FILING DATE: 1998-05-05
                                                                                                                                                                                                                                                                                                       \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/085582 FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085579
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 1998-05-APPLICATION NUMBER: 6
FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60 FILING DATE: 1998-05-
                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-05-
                                                                                                                                                                                                                                      gctgctctgtgtctctttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                             atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                           atganaaccatccagccaanaatgcacanttctatctcttgggcantcttcacggggctg
                                                                                                                         aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                             gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                      gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                  aagtggtgoctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                           aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                          DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                   100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084643
                                                                                                                                                                                                                                                                                                                                                                                                          60/085697
                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085338
                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                    Score 1032; DB 36;
Pred. No. 9.5e-288;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                  1679;
                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                   193
                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                   180
                                                                                                                                                                                                                             253
    493
                               360
                                                         433
                                                                                     300
                                                                                                                373
                                                                                                                                            240
                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                                                                                                                                                                            뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 734
```

```
Ş
                                                                                                                                                                                                                                                                                                                       US-09-978-194A-522; Sequence 522, App
                                                                                                                                                                                                                                                                                                          Sequence 522, Application US/09978194A GENERAL INFORMATION:
                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                             APPLICANT
                                                                                                                                                                                                                                                                           APPLICANT: Ashkenazi, APPLICANT: Baker Kev
 APPLICANT:
               APPLICANT:
                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                          1154
                                                                                                                                                                                                                                                                                                                                                                                                                          1021 cttctcaaattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atottottoaatgtototgaacatgactatgggaactacacttgcgtggcotocaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctccaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tycaytycotccaatgacytyyccycycccytyytacyyagaytaaagytcaccytyaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \verb|aacggcacgtcgaggagggcaggctgcgtctgctgctcttctggtcttgcacctg|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aacggcacgtcgaggaggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                         cttctcaaattt 1165
Kuo, Sop
Napier,
                                                                                                                                                                           Fong,
                            Gurney, Austin L. Hillan, Kenneth J Kljavin, Ivar J.
                                                                                                                                                               Gao,
                                                                             Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                              Goddard, Audrey
                                                                                                                           Gerritsen, Mary E.
                                                                                                                                                Gerber, Hanspeter
                                                                                                                                                                                             Ferrara, Na
Filvaroff,
                                                                                                                                                                                                                              Eaton, Dan
                                                                                                                                                                                                                                             Desnoyers, Luc
                                                                                                                                                                                                                                                              Botstein, David
                                                                                                                                                                                                                                                                        Baker Kevin P.
                                                                                                                                                               Wei-Qiang
               Sophia S.
                                                                                                                                                                                Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                           1032
                                                                                                                                                                                                                Napoleon
                                                                                                                                                                                                                                                                                              Av1
                                                                                                                                                                                               Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              973
```

```
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/06364
PRIOR FILING DATE: 1997-11-21
PRIOR PRICHAGO DATE: 1998-03-10
PRIOR FILING DATE: 1998-03-10
PRIOR FILING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/07
PRIOR APPLICATION NUMBER: 60/07
PRIOR FILING DATE: 1998-03-11
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/07
PRIOR FILING DATE: 1998-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/978,194A CURRENT FILING DATE: 2001-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/079689
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079663
PRIOR FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION N
PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION N
PRIOR FILING DATE:
                                                                                           PRIOR PRIOR
                                                                                                                           PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE:
R FILING DATE: 1
R APPLICATION NO
R FILING DATE: 1
R APPLICATION NO
R FILING DATE: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/078939
FILING DATE: 1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60
FILING DATE: 1998-03-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/
FILING DATE: 1998-03-12
                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/079728 FILING DATE: 1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/079656
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                          FILING DATE: 1998-0:
APPLICATION NUMBER:
FILING DATE: 1998-0:
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/079664
                                                                                                                             APPLICATION N
FILING DATE:
                                                                                                                                                                            APPLICATION
                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/079786
                                                                              FILING DATE: APPLICATION 1
                                                                                                              APPLICATION
                                                                                                                                                             FILING DATE: 1998-03-31
                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                          APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shelton, David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stewart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P2630P1C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Margaret Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nicholas
                NUMBER:
                                                NUMBER:
                                                                              NUMBER:
                                                                                                               NUMBER:
                                                                                                                                               NUMBER:
                                                                                                                                                                            NUMBER: 60/080105
                                                                                                                                                                                                           NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-03-20
                                                                                                                                                                                                                          1998-03-30
                                                                                                                                                                                                                                                                                                                                                                                       1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1998-03-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-03-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-03-20
                                                                                                                                                                                              1998-03-30
   NUMBER: 60/080328
1998-04-01
                                                                                                                                                                                                                                                          1998-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Timothy
                                                                  1998-03-31
                                   1998-04-01
                                                                                                  1998-03-31
                                                                                                                                1998-03-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/078910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/078936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/077649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/077632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/079294
                                                                                                                                                                                                          60/079923
                                                                                60/080194
                                                                                                                 60/080165
                                                                                                                                                                                                                                             60/079920
                                                60/080327
                                                                                                                                               60/080107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'zj
```

PRIOR APPLICATION NUMBER: 60/ PRIOR FILING DATE: 1998-04-09 PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-04-09 PRIOR RAPPLICATION NUMBER: 60/C EILING DATE: 1998-04 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081195 FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081071 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081049 APPLICATION NUMBER: FILING DATE: 1998-04-29 FILING DATE: 1998-04
APPLICATION NUMBER:
FILING DATE: 1998-04 FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082704
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/082804 FILING DATE: 1998-04-21 APPLICATION NUMBER: 60/082569 APPLICATION NUMBER: 60/082568 APPLICATION NUMBER: 60 FILING DATE: 1998-04-1 FILING DATE: APPLICATION NUMBER: 60/081952 APPLICATION NUMBER: 60/081819 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081955 FILING DATE: 1998-0.
APPLICATION NUMBER:
FILING DATE: 1998-0. APPLICATION NUMBER: APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: APPLICATION NUMBER: 60/084366 APPLICATION NUMBER: 60/083742 APPLICATION NUMBER: 60/083558 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-29 APPLICATION NUMBER: FILING DATE: 1998-0 FILING DATE: APPLICATION NUMBER: FILING DATE: 1998-04 APPLICATION NUMBER: APPLICATION NUMBER: 60/083392 APPLICATION NUMBER: 60/084637 FILING DATE: 1998-05-07 APPLICATION NUMBER: FILING DATE: 1998-05 FILING DATE: 1998-05-05 FILING DATE: APPLICATION NUMBER: 60/083559 APPLICATION NUMBER: 60/084639 FILING DATE: APPLICATION NUMBER: 60/084441 APPLICATION NUMBER: 1998-04-15 1998-04-1998-04-22 1998-04-29 1998-04-1998-04-22 1998-04-22 1998-04-29 1998-04-29 1998-05-06 1998-05-06 1998-04-30 1998-04-29 998-04-08 998-04-23 60/081229 60/08/1203 60/081070 60/080334 60/080333 60/081838 60/081817 60/082797 60/082700 60/083322 60/083336 60/082796 60/083545 60/083499 60/083495 60/084414 60/083500 60/083554

```
δõ
                                                                                                                                                                                                                                                                                                                                                                                          Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                          Qy
                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                              Qy
                                                                                                           멍
                                                                                                                                    20
                                                                                                                                                                    B
 맑
                        δÃ
                                                     Β̈́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                    434
                                                                                                                                                                                                                           374
                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                 314
                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                       254
                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                             194
                                                                                                                                                                                                                                                                                                                                                                                                                                                 134
 614
                             481
                                                                                 421
                                                                                                             494
                                                                                                                                                                                                301
                                                        554
                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
nes 1032; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAPPLICATION NUMBER: 60/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/084598 FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/085339 FILING DATE: 1998-05-13 APPLICATION NUMBER: 60/085338 FILING DATE: 1998-05-13 APPLICATION NUMBER: 60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1998-05
APPLICATION NUMBER:
FILING DATE: 1998-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085579
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/08580
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 1998-09
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60 FILING DATE: 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/085700 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/085582
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                             aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                   gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                                                                                                                                                                                                                                                                                                                                                          gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                          gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                   atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                    gotatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 313
ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                   aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                       aagtggtgcctggatcctcgcgttggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
              ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggcttgtg
                                                                     atttottcagatatotocattaatgaagggaacaatattagoctcacotgcaïagcaact
                                                                                                             aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                           aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                     atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/084643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/084627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/084600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/084640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/085689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/085704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1032; DB 36; Pred. No. 9.5e-288; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
```

60 193

0;

253

420 493

553

480

613

673

300 373 240

```
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
US-09-978-295A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 522, Application:
                                                                                                                                                                                                                                                                                                                                                                APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                        APPLICANT:
                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
        APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630PIC11
FILE REFERENCE: P2630PIC11
                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                      APPLICANT
CURRENT APPLICATION NUMBER: US/09/978,295A
                                                                                             APPLICANT:
                                                                                                                                     APPLICANT:
                                                                                                                                                     APPLICANT:
                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctgggccaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atcttetteaatgtetetgaacatgaetatgggaactaeaettgegtggeeteeaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atottottoaatgtototgaacatgactatgggaactacacttgcgtggcotccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agactgattgaaggaaagaaagggtgaaagtggaaaacagacctttcctctcaaaactc 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgcgcgcgcgtggtacggagagtaaaggtcaccgtgaac 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcagggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aacggcacgtcgaggagggcaggctgcgtctggctgctgcctctctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                          Ashkenazi,
                                                                                                                                                                                                                                    Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                       Fong,
                                                                                         Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                  Gerritsen, Mary
                                                                                                                                                                                                                                                                                               Gerber,
                                                                                                                                                                                                                                                                                                                                                                   Eaton,
                                                                                                                                                                                                                                                                                                                                                                                Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                           Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                            Baker Kevin
                                                                                                                                                                                 Kuo,
                                                                                                                                                                                                          Gurney, Austin Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                       Filvaroff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09978295A
                                                                                                                                        Paoni, Nicholas
                                                                                                                                                     Pan, James;
                                                                                                                                                                                              Kljavin,
                                                                                                                                                                  Napier, Mary A.
                                                                                                                                                                                 vin, Ivar J.
Sophia S.
                                                                                                                                                                                                                                                                                                              Wei-Qiang
                                                                                                                        Margaret Ann
                                                                                                                                                                                                                                                                                                                           Sherman
                                                                                                                                                                                                                                                                                                                                                                   Dan
                                                                                                                                                                                                          i, J.
, Austin L.
, neth J
                                                                                                                                                                                                                                                                                            Hanspeter
                                                                                                                                                                                                                                                                                                                                                     Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                          Avi
                                                                                                                                                                                                                                                                                                                                                                                                             יטי.
                                                                                                                                         щ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
```

CURRENT
PRIOR AF
PRIOR FI
PRIOR AF
PRIOR FI

NT FILING DATE: 2001-10-15
APPLICATION NUMBER: 09/918585
FILING DATE: 2001-07-30

PRIOR PRIOR

PRIOR

OR APPLICATION NUMBER: 60/062250
OR APPLICATION NUMBER: 60/064249
OR APPLICATION NUMBER: 60/064249
OR FILING DATE: 1997-11-03
OR APPLICATION NUMBER: 60/065311
OR FILING DATE: 1997-11-13
OR APPLICATION NUMBER: 60/066364
OR APPLICATION NUMBER: 60/07636
OR APPLICATION NUMBER: 60/077450
OR APPLICATION NUMBER: 60/077450
OR FILING DATE: 1998-03-10

PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/06
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/07
PRIOR APPLICATION NUMBER: 60/07
PRIOR APPLICATION NUMBER: 60/07
PRIOR FILING DATE: 1998-03-11
PRIOR FILING DATE: 1998-03-11

60/077632 60/077641

PRIOR

APPLICATION NUMBER: FILING DATE: 1998-0

1998-03-

PRIOR PRIOR

FILING

DATE: 1998-03-1

APPLICATION NUMBER: 6
FILING DATE: 1998-03APPLICATION NUMBER: 6

FILING DATE: 1998-03-APPLICATION NUMBER:

PR APPLICATION NUMBER: 60/07
PR FILING DATE: 1998-03-20
PR APPLICATION NUMBER: 60/07
PR FILING DATE: 1998-03-20

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

OR FILING DATE: 1998-03-20
IN APPLICATION NUMBER: 60/07
OR FILING DATE: 1998-03-20
OR APPLICATION NUMBER: 60/07
OR FILING DATE: 1998-03-20
OR FILING DATE: 1998-03-20

60/078939 60/078910 60/078936 60/078886 60/078004 60/077791 60/077649

PRIOR PRIOR PRIOR APPLICATION NUMBER: 60/081819 PRIOR FILING DATE: 1998-04-15 PRIOR APPLICATION NUMBER: 60/081952 PRIOR APPLICATION NUMBER: 60/081838 PRIOR FILING DATE: 1998-04-15 PRIOR APPLICATION NUMBER: 60, PRIOR APPLICATION NUMBER: 60, PRIOR FILING DATE: 1998-04-1 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0 PRIOR FILING PRIOR APPLICATION NUMBER: 60/082568 PRIOR OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083499
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083558
OR APPLICATION NUMBER: 60/083558 OR FILING DATE: 1998-04-22
OR APPLICATION NUMBER: 60/08
OR PLING DATE: 1998-04-23
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-27 DR FILING DATE: 1998-04-22
NR APPLICATION NUMBER: 60/08
NR FILING DATE: 1998-04-22
NR PILING DATE: 1998-04-22
NR FILING DATE: 1998-04-22
NR APPLICATION NUMBER: 60/08
NR APPLICATION NUMBER: 60/08 DR APPLICATION NUMBER: 6
DR FILING DATE: 1998-04
DR APPLICATION NUMBER: 6
DR FILING DATE: 1998-04
DR APPLICATION NUMBER: 6
DR APPLICATION NUMBER: OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/01
OR APPLICATION NUMBER: 60/01
OR APPLICATION NUMBER: 60/01
OR FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/1 FILING DATE: 1998-04-09 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-28 FILING DATE: 1998-04-21 APPLICATION NUMBER: 60/082704 FILING DATE: 1998-04-21 APPLICATION NUMBER: 60/082569 FILING DATE: APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER: FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-29 FILING DATE: 1998-04 APPLICATION NUMBER: APPLICATION NUMBER: 60/084598 FILING DATE: 1998-05-07 APPLICATION NUMBER: FILING DATE: 1998-09 FILING DATE: 1998-05-05 APPLICATION NUMBER: APPLICATION NUMBER: 60/0 FILING DATE: 1998-04-30 FILING DATE: APPLICATION APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0 APPLICATION NUMBER: 60/084643 NUMBER: 60/082797 . NUMBER: 60/084640 : 1998-05-07 NUMBER: 60/ : 1998-05-06 1998-04-1 1998-04-15 1998-04-09 1998-04-29 1998-04-1998-04-1998-05-07 1998-05-06 UMBER: 60/084627 1998-05-07 1998-05-07 60/081817 60/081229 60/081203 60/081955 60/083336 60/082796 60/082700 60/082804 60/083495 60/083392 60/083322 60/084441 60/083559 60/084600 60/084639 60/084637 60/084414 60/084366 60/083742 60/083500 60/083496

PRIOR APPLICATION NUMBER: 60/079786
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079920
PRIOR FILING DATE: 1998-03-30

APPLICATION NUMBER: FILING DATE: 1998-0

1998-03-

60/079689 60/079664

APPLICATION NUMBER: 60/ FILING DATE: 1998-03-27

APPLICATION NUMBER: 60/079728 APPLICATION NUMBER: 60/079663 FILING DATE: 1998-03-27

FILING DATE:

1998-03-27

APPLICATION NUMBER: 60/079656 FILING DATE: 1998-03-26 APPLICATION NUMBER: 60/079294 FILING DATE: 1998-03-25

FILING DATE:

PRIOR PRIOR PRIOR PRIOR

R FILING DATE: 1998-04RR APPLICATION NUMBER: 6
RR FILING DATE: 1998-04RR APPLICATION NUMBER: 6
RR APPLICATION NUMBER: 6
RR APPLICATION NUMBER: 6
RR APPLICATION NUMBER: 6
RR APPLICATION NUMBER: 6

1998-04-08

60/081070

NUMBER: 60/081049 : 1998-04-08

60/081071

PRIOR PRIOR

R FILING DATE: R APPLICATION N R FILING DATE:

NUMBER:

60/081195

1998-04-08

PRIOR PRIOR PRIOR PRIOR PRIOR

R APPLICATION N R FILING DATE: R APPLICATION N

NUMBER:

60/080328

NUMBER: 60/080333

1998-04-01

FILING DATE: APPLICATION N

NUMBER:

60/080334

1998-04-01 1998-04-01 OR FILING DATE: 1998-03-31
REPLICATION NUMBER: 60/080165
DR APPLICATION NUMBER: 60/080194
OR APPLICATION NUMBER: 60/080194
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080327
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080327

FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080107 APPLICATION NUMBER: 60/080105 APPLICATION NUMBER: 60/079923 FILING DATE: 1998-03-30

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                              D
                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                     В
                                                                                                                             Qy
                                                                                                                                                                            밁
                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                       맑
B
                                     Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OR APPLICATION NUMBER: 60/085689
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085579
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085580
OR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134
                                                                                                                                                                                                                                                                                                                                                                                                                                                           494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194
                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R FILING DATE: 1998-05-
R APPLICATION NUMBER: 6-
R FILING DATE: 1998-05-
R APPLICATION NUMBER: 6-
R APPLICATION NUMBER: 6
                                             661
                                                                                                                                  109
                                                                                                                                                                               674
                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
794
                                                                                       734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/085697 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/085704 FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aagtggtgcctggatcctcgcgttggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gctgctctgtgtctcttcccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     {\tt aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                            agtgaagacgaatacttggaaattcagggcatcaccgggagcagtcaggggactacgag
                                                                                                                                                                                                    agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag 600
                                                                                                                                                                                                                                                                       ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                              ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                              atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                 atttetteagatateteeattaatgaagggaacaatattageeteacetgcatagcaact 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaccacccaaagacctotagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                            tgcagtgcctccaatgacgtggccgcgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                       tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                  tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998-05-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-05-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/085700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/085582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/085323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/085338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1032; DB 36;
Pred. No. 9.5e-288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                          613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
         853
                                                                                                                                                                                                                                                                                  673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    553
                                                                                                 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
```

Db Qy

Qy

```
US-09-978-298A-522; Sequence 522; App
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane in the Series of Invention: Acids Encoding the Same of Interest of Invention: Acids Encoding the Same of Interest of Invention in Interest of Int
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Ashkenazi, A:
APPLICANT: Baker Kevin
APPLICANT: Botstein, D
APPLICANT: Desnoyers
APPLICANT: Eaton, Dan
APPLICANT: Ferrara, Na
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1094 aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1154 cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021 cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctccaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agactgattgaaggaaaggaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atottottcaatgtototgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fong,
Gao, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerritsen, Mary E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Grimaldi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09978298A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pan, James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Αvi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ס
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Transmembrane Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
```

PRIOR PRIOR PRIOR PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILING DATE: 1998-04-23
PRIOR APPLICATION NUMBER: 60/083336 PRIOR PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0 PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR OR APPLICATION NUMBER: 60/0 OR APPLICATION NUMBER: 60/08 FILING DATE: 1998-04-21 OR FILING DATE: 1998-04 OR APPLICATION NUMBER: 60/08 OR APPLICATION NUMBER: 60/083496
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083559
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/083559
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29 N FILING DATE: 1998-04-27
R APPLICATION NUMBER: 60/083322
R FILING DATE: 1998-04-28
OR APPLICATION NUMBER: 60/083392
OR FILING DATE: 1998-04-28
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29
OR FILING DATE: 1998-04-29 OR FILING DATE: 1998-05-05
OR APPLICATION NUMBER: 60/084414
OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084441
OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084637
OR APPLICATION NUMBER: 60/084637
OR APPLICATION NUMBER: 60/084639
OR FILING DATE: 1998-05-07
OR FILING DATE: 1998-05-07 OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-29
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-30
OR APPLICATION NUMBER: 60/08 PR FILING DATE: 1998-05-07
RE APPLICATION NUMBER: 60/08
PR FILING DATE: 1998-05-07
PR FILING DATE: 1998-05-07
PR FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/0 FILTING DATE: 1998-04-22 DR APPLICATION NUMBER: 6
RR FILING DATE: 1998-05-6
RR FILING DATE: 1998-05-6
DR FILING DATE: 1998-05-6
DR PILING DATE: 1998-05-6
DR FILING DATE: 1998-05-6 APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60 FILING DATE: 1998-04-1 R FILING DATE: 1998-05-13
R APPLICATION NUMBER: 60/00
R FILING DATE: 1998-05-15
R FILING DATE: 1998-05-15
R FILING DATE: 1998-05-15 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/084600 FILING DATE: 1998-05-07 APPLICATION NUMBER: FILING DATE: 1998-0: APPLICATION NUMBER: APPLICATION NUMBER: 60/085689 FILING DATE: 1998-05-15 DATE: 1998-05-13 NUMBER: 60/085579 1998-05-1998-05-07 1998-05-07 998-04-22 60/082804 60/082704 60/081838 60/082797 60/083500 60/083742 60/085338 60/084643 60/084627 60/084598 60/084640 60/084366 60/085582 60/085323

PRIOR PRIOR

OR APPLICATION NUMBER: 60/080194
OR FILING DATE: 1998-03-31
OR FILING DATE: 1998-03-31
OR APPLICATION NUMBER: 60/080327
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080333
OR APPLICATION NUMBER: 60/080333
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080334
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080304
OR APPLICATION NUMBER: 60/080304
OR APPLICATION NUMBER: 60/081070

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION N FILING DATE:

NUMBER:

60/081195

1998-04-08

NUMBER: 60/081203

DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-04-09
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-04-09
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/08
DR FILLING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-15
DR APPLICATION NUMBER: 60/08
DR FILING DATE: 1998-04-15

60/081817 60/081955 60/081229

NUMBER: 60/081819 1998-04-15 NUMBER: 60/081952 1998-04-15

PRIOR PRIOR

OR FILING DATE: 1998-04-08
BR APPLICATION NUMBER: 60/08
OR EILING DATE: 1998-04-08
OR APPLICATION NUMBER: 60/08
OR FILING DATE: 1998-04-08
OR FILING DATE: 1998-04-08

NUMBER: 60/081071

60/081049

PRIOR PRIOR

FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/ FILING DATE: 1998-03-27

60/079663

60/079728 13-27

60/079786

60/079920

DR APPLICATION NUMBER: 60, OR APPLICATION NUMBER: 603-20 PM FILING DATE: 1998-03-20 PM FILING DATE: 1998-03-20 PM FILING DATE: 1998-03-30 PM FILING DATE: 19

R APPLICATION N
R FILING DATE:
R APPLICATION N

NUMBER:

60/080105

NUMBER: 60/079923

1998-03-30 1998-03-30

APPLICATION NUMBER: 60/080107 FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/080165

FILING DATE: 1998-03-31

DR FILING DATE: 1998-03-20
DR APPLICATION NUMBER: 60/079294
DR FILING DATE: 1998-03-25
DR APPLICATION NUMBER: 60/079656
DR FILING DATE: 1998-03-26
DR APPLICATION NUMBER: 60/079664
DR APPLICATION NUMBER: 60/079669
DR FILING DATE: 1998-03-27
DR FILING DATE: 1998-03-27
DR FILING DATE: 1998-03-27

PRIOR PRIOR

FILING DATE: 1998-0: APPLICATION NUMBER:

60/078939

OR FILLIA.

OR APPLICATION NUMBER: 00,...

OR FILING DATE: 1998-03-20

IOR APPLICATION NUMBER: 60/078936

IOR FILING DATE: 1998-03-20

IOR APPLICATION NUMBER: 60/078910

OTT THE DATE: 1998-03-20

PRIOR PRIOR

PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR

FILING DATE: 1998-03-1 APPLICATION NUMBER: 60 FILING DATE: 1998-03-1

60/078004

1998-03-13

PRIOR PRIOR

OR FILING DATE: 1998-03-10
OR APPLICATION NUMBER: 60/077632
OR FILING DATE: 1998-03-11
OR APPLICATION NUMBER: 60/077641
OR FILING DATE: 1998-03-11
OR APPLICATION NUMBER: 60/077649
OR FILING DATE: 1998-03-11
OR APPLICATION NUMBER: 60/077791

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Βb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                      B
                          94
                                                    밁
                                                                              ρ
                                                                                                            밁
                                                                                                                                  Qy
                                                                                                                                                                  В
                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                      밁
 ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085580
OR PRILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085573
OR FILING DATE: 1998-05-15
OR APPLICATION NUMBER: 60/085704
OR APPLICATION NUMBER: 60/085697
OR APPLICATION NUMBER: 60/085697
OR FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                              494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254
                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                        554
                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                  614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
 974
                            841
                                                     914
                                                                                 781
                                                                                                            854
                                                                                                                                                                  794
                                                                                                                                                                                             661
                                                                                                                                                                                                                      734
                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                             674
                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
les 1032; Conserv
                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcagggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atgaaaaccatccagccaaaaatgcacaattctatctttgggcaatcttca sggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                               tatccaccatacatttcagaagccaagggtacaggtgtccccgtggggacaaaaggggaca 720
                                                                                                                                                                                                                                    tgcagtgcctccaatgacgtggccgcgcgcccgtggtacggagagtaaaggtcaccgtgaac 660
                                                                                                                                                                                                                                                                                                                                                                                        atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                     atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                   tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac 793
                                                                                                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                          agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                 ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                 ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                              aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
\verb|atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag|
                                                                     agactgattgaaggaaagaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                           ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                           ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                     agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctct%aaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1032; DB 36; Pred. No. 9.5e-288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
     1033
                               900
                                                                                                                913
                                                                                                                                                                                                                                                                                733
                                                                                                                                                                                                                                                                                                                                     673
                                                           973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
```

```
망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-978-299A-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δδ
A
                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILLING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILLING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILLING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILLING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILLING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILLING DATE: 1998-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 522,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
APPLICANT: Botstein, Dav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Secreted and Transmembrane TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C3
CURRENT APPLICATION NUMBER: US/09/978,299A
CURRENT FILING DATE: 2001-10-15
               PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1154 cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                            APPLICATION NUMBER: 60/077450 FILING DATE: 1998-03-10 APPLICATION NUMBER: 60/077632 FILING DATE: 1998-03-11 APPLICATION NUMBER: 60/077641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aacggcacgtcgaggagggcaggctgcgtctggctgtctgcctcttctggtcttgcacctg 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
            FILING DATE: 1998-03-12
APPLICATION NUMBER: 60/
FILING DATE: 1998-03-13
                                                           FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077649
FILING DATE: 1998-03-11
APPLICATION NUMBER: 60/077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gurney, Austin I
Hillan, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ferrara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eaton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       James;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sherman
NUMBER: 60/078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nicholas F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ש
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US/09978299A
                                 60/078004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      r
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                         and
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1093
```

PRIOR APPLICATION NUMBER: 50/
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-61/

60/079689 3-27 60/079663

APPLICATION NUMBER:

APPLICATION NUMBER: 60/079664 FILING DATE: 1998-03-27

1998-03-26

60/079656 60/079294 60/078939

PRIOR PRIOR PRIOR PRIOR PRIOR

FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-30 FILING DATE: 1998-03-27 APPLICATION NUMBER: 60/ FILING DATE: 1998-03-27

PRIOR PRIOR

APPLICATION NUMBER: 60/ FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/ FILING DATE: 1998-03-31 APPLICATION NUMBER: 60/0 FILING DATE: 1998-03-30

60/080107 60/080105 60/079923 60/079920 60/079786 60/079728

PRIOR PRIOR

PRIOR

APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01

APPLICATION

NUMBER:

60/080328 60/080327

RAPPLICATION NUMBER: 60/080165 FILING DATE: 1998-03-31 RAPPLICATION NUMBER: 60/080194 FILING DATE: 1998-03-31

PRIOR PRIOR PRIOR PRIOR

FILING DATE: 1998-04 APPLICATION NUMBER: FILING DATE: 1998-04 FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/ FILING DATE: 1998-04-01 APPLICATION NUMBER: 60/080333

1998-04-00

1998-04-08

60/081070 60/080334

FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081203
FILING DATE: 1998-04-09
APPLICATION NUMBER: 60/081229

APPLICATION NUMBER: 60/081071 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081049 FILING DATE: 1998-04-08

APPLICATION NUMBER: 60/081195

PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR

FILING DATE: APPLICATION N APPLICATION NUMBER: FILING DATE: 1998-04-1 FILING DATE: 1998-04 APPLICATION NUMBER:

NUMBER:

1998-04-21

FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/
FILING DATE: 1998-04-22
APPLICATION NUMBER: 60/

APPLICATION FILING DATE: FILING DATE:

1998-04-22

60/082700 60/082804 60/082704 60/082569 60/082568 PRIOR PRIOR PRIOR PRIOR PRIOR

APPLICATION NUMBER: 60/081952

1998-04-15

60/081838

PRIOR

FILING DATE:

1998-04-09

DR APPLICATION NUMBER: 60/081955

OR FILING DATE: 1998-04-15

OR APPLICATION NUMBER: 60/081817

OR FILING DATE: 1998-04-15

OR APPLICATION NUMBER: 60/081819

OR FILING DATE: 1998-04-15

OR FILING DATE: 1998-04-15

PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0:
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0:

APPLICATION NUMBER: 6
FILING DATE: 1998-03-FILING DATE:

PRIOR

APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: 1998-0: FILING DATE: 1998-0 APPLICATION NUMBER: FILING DATE: 1998-0

1998-03-

1998-03-

1998-03-

/078910

1998-03-20

60/078936

PRIOR

PRIOR

```
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING PRIOR APPLICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/083392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/083322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1998-0 PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                 PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR
                                                                                                                         PRIOR
                                                                                                                                                                      PRIOR
                                                                                                                                                                                                   PRIOR PRIOR
                                                                                                                                                                                                                                  PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OR APPLICATION NUMBER: 60/083742
OR FILING DATE: 1998-04-30
OR APPLICATION NUMBER: 60/08436
OR FILING DATE: 1998-05-05
OR ETLING DATE: 1998-05-05
OR PILING DATE: 1998-05-06
OR PILING DATE: 1998-05-06
OR PILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084441
OR PILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084637
OR APPLICATION NUMBER: 60/084639
OR APPLICATION NUMBER: 60/084639
OR APPLICATION NUMBER: 60/084639
OR APPLICATION NUMBER: 60/084639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-
R APPLICATION NUMBER: 6
R FILING DATE: 1998-04-
                                                                                                                                                                                                                                                               R FILING DATE: 1998-05-07
RE APPLICATION NUMBER: 60/08
RE FILING DATE: 1998-05-13
RE APPLICATION NUMBER: 60/08
RE FILING DATE: 1998-05-13
RE APPLICATION NUMBER: 60/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/0
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/083545
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/083559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083558
FILING DATE: 1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/083499
FILING DATE: 1998-04-29
                                                                                                                                                                                                                     FILING DATE: 1998-05-13
APPLICATION NUMBER: 60/085582
FILING DATE: 1998-05-15
                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084598
FILING DATE: 1998-05-07
APPLICATION NUMBER: 60/084600
                                                                                                                                                      APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/0
FILING DATE: 1998-05-15
                                                                                          APPLICATION NUMBER: FILING DATE: 1998-0
                                                                                                                         APPLICATION NUMBER: 60/0 FILING DATE: 1998-05-15
              FILING DATE: APPLICATION
                                             APPLICATION NUMBER:
                                                           FILING
                                                                            APPLICATION NUMBER: 60/085573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DATE:
                             DATE:
                                                           DATE:
                                                                                                                                                                                                                                                                                                                                                                    мимьек: 60/084627
: 1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1998-04-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1998-04-29
                NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER: 60/084640
1998-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1998-04-29
NUMBER: 60/085697
1998-05-15
                                                                                             1998-05-15
                              1998-05-
                                                             1998-05-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/082797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/083496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/083495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60/083336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60/083500
                              60/085704
5-15
                                                                                                            60/085580
                                                                                                                                           60/085579
                                                                                                                                                                      60/085689
                                                                                                                                                                                                     60/085700
                                                                                                                                                                                                                                                                    60/085323
                                                                                                                                                                                                                                                                                                 60/085338
                                                                                                                                                                                                                                                                                                                                60/085339
                                                                                                                                                                                                                                                                                                                                                             60/084643
```

Query Match Best Local Similarity 100.0%;

Score 1032; DB 36; Pred. No. 9.5e-288;

Length 1679;

134

61

B Qy 망 Qy DЬ δõ DЪ 24

314 181 254 121 194

δÃ 맑 Qy

```
Matches 1032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 atgaaaaccatccagccaaaaatgoacaattctatctctttgggcaatcttcäcggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atttottoagatatotocattaatgaagggaacaatattagootoacotgcatagcãact 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtocacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agtgaagacgaatacttggaaattcagggcatcaccccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atttottcagatatotccattaatgaagggaacaatattagcotcacotgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                    tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                tgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                    tgcagtgcctccaatgacgtggccgcgcccgtggtaccggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                 atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                             agactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                         ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                        ctgcagtgtgaagcctcagcagtcccctcagcagaattcccagtggtacaaggatgacaaa
                                                       aacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtcttgcacctg
                                                                                                                                                                                                                                           agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
cttctcaaattt 1165
                           cttctcaaattt 1032
                                                                                                                      ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                     ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                   atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 373
                                                                                                                                                                                                                                                                                                                                                                                                                                          793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    673
                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                            1020
                                                                                                                                                                                         1033
                                                                                                                                                                                                                                                                                                                 913
                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                              853
                                                               1153
                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                     973
                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
US-09-978-585-522
                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                             ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-978-585-522
                                                                                                                                        Qy
                                                                                                                                                                          Вþ
                                                                                                                                                                                                      20
                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                   В
                 δÃ
                                                                          Ωy
                                                                                                             밁
                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 522, Application:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/978,585
CURRENT FILING DATE: 2001-10-16
NUMBER OF SEQ ID NOS: 624
Prior Application removed - See File Wrapper or Palm
SEQ ID NO 522
LENGTH: 1679
                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Ashkenazi,
APPLICANT: Baker Kev
APPLICANT: Botstein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: P2630P1C15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
                                                                                                                                                                                                                                                                                                    134
                     301
                                                                               241
                                                                                                              314
                                                                                                                                           181
                                                                                                                                                                            254
                                                                                                                                                                                                         121
                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                             y Match 100.0%;
Local Similarity 100.0%;
hes 1032; Conservative 0
                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                1 atgaaaaccatccagocaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                     gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
 aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaaacgcagtacagcatc
                                                                                                           aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                          aaccqggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                       gctatggacaacgtgacggtccggcagggggggggcgccccctcaggtgcactattgac
                                                                                                                                                                                      gctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                       gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INVENTION: Secreted and Transmembrane Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerric
Goddwski, Paul J.
Godowski, Paul J.
Grimaldi, J. Christopher
Grimey, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gerber, Hanspeter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Filvaroff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ferrara, Napoleon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eaton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Botstein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Baker Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Williams,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kljavin, Ivar J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Paoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kuo, Sophia S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09978585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sherman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nicholas F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Acids Encoding the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Avi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               שי
                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                               Score 1032; DB 36;
Pred. No. 9.5e~288;
                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Same
                                                                                                                                                                                                                                                                                                                                                                      0;
```

and

Qy

QУ 뮹 Qy 밁

601

661 734

Indels

;

Gaps

0

120 193 60

253

180 313

373 240

360 433 300 Length 1679;

674 541 614 481 554 421 494 361 434 301 374 241

δÃ B δõ DЪ

δÃ 맑 γ Ъ Š 뫄

901 974 841 914 781 854 721 794

1034

8 Db

961

В

δÃ

1021 1094

밁

1154

QΥ 망 Qy В

Вp

```
Qy
                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                QY
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                          DЪ
                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                             В
                                                                                                                                                QУ
                                                                                                                                                                     В
                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                B
                                                         QY
                                                                                                    Qy
                Qy
                                       밁
                                                                                  Дb
                                        1094
1154
                                                                                   1034
                                                                                                                                                                                                                                                                                                                                              674 agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                          541 agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                          614
                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                   554
                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       434
                                                                                                                                                                                                                                                                                                    734
                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                854
                                                                                                                                                                                                                                                                                661
                                                              961
                                                                                                        901
                                                                                                                              974
                                                                                                                                                  841
                                                                                                                                                                        914
                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                           794
                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageacet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                       ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agactgattgaaggaaaggagggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                           tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                                                                                                                                                                                                                                    tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca 720
                                                                                                                                                                                                                                                                                                    tgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaac 793
                                                                                                                                                                                                                                                                                                             tgcaqtgcctccaatgacgtggccgccgccgtggtacggagagtaaaggtcaccgtgaac 660
                                       aacggcacgtcgaggagggcaggctgcgtctggctgctctcttctggtcttgcacctg
                                                                                ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc 960
                                                                                                                             atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                        atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag 900
                                                                                                                                                                    {\tt agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctaaaactc}
                   cttctcaaattt 1032
                                                   aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgcacctg 1020
cttctcaaattt 1165
                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                        613
                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             493
                                                                                                                                                                                                                                                                                                                                                    733
                                                                                                                                                                                                                                                                                                                                                                                              673
                                                                                        1093
                                                                                                                                  1033
                                                                                                                                                                            973
                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                 853
```

search completed: July 12, 2002, 00:25:10
Job time: 13628 sec

```
Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                   Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           on:
                                                                                                                                                                                                                                                                                                                                 No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB seq length: 0
DB seq length: 2000000000
1693
1661.4
1661.4
1661.4
1661.4
1585.8
1588.8
1455.4
1297.4
                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N_Geneseq_032802:*
1: /SIDS1/gcgdata/gc2: /SIDS1/gcgdata/gc3: /SIDS1/gcgdata/gc5: /SIDS1/gcgdata/gc5: /SIDS1/gcgdata/gc6: /SIDS1/gcgdata/gc6: /SIDS1/gcgdata/gc7: /SIDS1/gcgdata/gc9: /SIDS1/gcgdata/gc9: /SIDS1/gcgdata/gc9: /SIDS1/gcgdata/gc9: /SIDS1/gcgdata/gc9: /SIDS1/gcgdata/gc1: /SID
100.0
98.1
98.1
98.1
98.1
96.0
93.8
86.0
76.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            July 11, 2002, 23:01:01; Search time 435.78 Seconds (without alignments) 6670.192 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                    Match
                                                                                                                                                                                                                                                                                                                                                                   Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1736436 seqs, 858457221 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-700-397-2
1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SIDSI/gcgdata/geneseq/geneseqn-embl/NA198.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA198.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA198.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA199.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA2001.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA2001.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA2001.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA2001.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA2001.DAT:*
| SIDSI/gcgdata/geneseq/geneseqn-embl/NA2001.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gtccttcagcaaaacagtgg.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1985.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1986.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1987.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1984
/SIDS1/gcgdata/geneseq/geneseqn-embl/NA1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1983
                                                                                                                                                                                                                                                                                                                                    Length DB
   1693
1679
1679
1679
1679
2012
2012
1603
1678
                                                                                                                                                                                                                                                                                                                                       IJ
                                  AAZ47893
AAZ34324
AAC78590
AAS21431
AAC87037
AAA88791
AAA88790
AAI57869
                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ....aaaaaaaaaaaaaaaaaaa 1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3472872
                                                                  Human cDNA sequenc
Nucleotide sequenc
Human SECX cDNA Cl
Human SECX cDNA Cl
                                                                                                                                                                                                                                                                                                                                    Description
                                                                                                                                                                                                          Human
                                                                                                                                                                                                   PRO337 nucle
                                                                                                                                                                                                                                                                         protein enco
                                  polynucleoti
                                                                                                                                                                                                                                         PRO337 nucle
```

o o

340.6 340.6 338.6 337.4 337.4 337.4 337.2 377.2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1032 939 787.8 540.8 523 523 503 475.2 439.2
	55.55 55.55
924 924 1017 1017 1017 1017 1017 1017 1017 101	
117 117 117 117 117 117 117 117 117 117	21 21 21 21 14 14 14 14 22 22 22 23
AAT42084 AAT42079 AAT42081 AAT42082 AAT42082 AAT42085 AAT42087 AAT42087 AAT42087 AAT42094 AAT42094 AAT42094 AAT42094 AAT42095 AAC78034 AAC78034 AAC7855 AAC7855 AAC78596 AAC78	AAZ47892 AAZ47894 AAA44536 AAQ51015 AAQ51017 AAQ51016 AAQ51016 AAZ34325 AAC78591 AAC91321 AAC91321 AAC91321 AAC91321 AAC91321
an LAMP reside LAMP reside an LAMP reside an mature LAMP residue LAMP clone can can secreted properties of the control of	Human protein enco Human protein enco Human secreted exp Rat opioid recepto Rat opioid recepto Rat opioid recepto Rat opioid recepto Human EST DNA42301 Human EST DNA42301 Human folypucleoti Spinal cord tissue DNA encoding novel Rat LAMP coding se

44444 54444 54444 544

ALIGNMENTS

```
RESULT
AAZ47893
 CDS
                                                                                                                                                         Homo
                                                                                                                                                                         Human; haematopoietic cell regulation; tissue generation; reparation; activin; inhibin; taxis; chemotaxis; blood coagulation; thrombus; receptor; ligand; autoimmune; infection-related immunodeficiency; inflammatory disorder; neurological disease; ss.
                                                                                                                                                                                                                                                                AAZ47893;
                                                                                                                                                                                                                                                                                  AAZ47893 standard; cDNA; 1693 BP.
Fukushima D,
                                                        13-MAY-1999;
                                                                            18-NOV-1999.
                                                                                              W09958668-A1
                                                                                                                                                                                                                         Human protein encoding cDNA SEQ ID NO:3.
                                                                                                                                                                                                                                             10-MAR-2000 (first entry)
                  (ONOY ) ONO PHARM CO LTD.
                                      14-MAY-1998;
                                                                                                                                                        sapiens
Shibayama S,
                                     98JP-0131815.
                                                         99WO-JP02485.
                                                                                                                          Location/Qualifiers 214..1164
  Tada
 Щ
```

AAI59655

polynucleoti

```
ν
                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                     ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                В
                                                                                                                                        ρy
                                                                                                                                                                         DЪ
                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                         В
뎞
                       δÃ
                                                        В
                                                                                 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence encodes a specifically claimed novel human protein. The novel human protein can be used in therapeutic drugs for the prevention and treatment of a broad range of disorders including autoimmune and infection-related immunodeficiency, inflammatory disorders, and neurological diseases. The novel protein is expected of having haematopoietic cell regulatory activity tissue generation/reparation activity, activin/inhibin activity, taxis/chemotaxis activity, blood coagulation and thrombus activity, and receptor/ligand activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1693 BP; 518 A; 432 C; 416 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                             541
                                                                                                                                                                          481
                                                                                                                                                                                                     481
                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
 661
                           661
                                                        601
                                                                                    601
                                                                                                                541
                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100
nes 1693; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polypeptides of human eration, coagulant and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atcaggaaagaaagaaagaaaaaaaccgaacctgacaaaaaagaagaagaaaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000-062298/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atcaggaaagaaagaaaaaaaaaaccgaacctgacaaaaaaagaagaaaaaaagaagaaga
                                                                   atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                tacaqcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                          gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                 actattgacaaccgggtcacccgggtggcctggcttaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                          ttccccaaagctatggacaacgtgacggtccggcagggggagagcgcccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acggggctggctgctgtgtctctttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
            ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                 attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                               attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                       cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                  tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                           gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                    actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                           ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5; Page 42-45; 84pp; Japanese.
ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                       atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                          cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY57601.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               origin having cel
other activities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1693;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        327 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cell regulatory, tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1693;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
    720
                                                            660
                                                                                                                    600
                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
```

RESULT AAZ34324 ID AAZ XX

AAZ34324

standard;

cDNA;

1679 BP

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ϋ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DЬ
                                                                                                                                                                                         Q
                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                            뫄
                                                                                                                                               δδ
                                                                                                                                                                      В
                                                                                                                                                                                                               밁
                                                            Š
                                                                                                     20
뮍
                  Qy
                                         멍
                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021
                                                                                                                                                                                                                1381
1681
                    1681
                                         1621
                                                                                                       1561
                                                                                                                             1501
                                                                                                                                                                       1441
                                                                                                                                                                                            1441
                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                          1321
                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                     1261
                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                              1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gactacgagtgcagtgcctccaatgacgtggccgccgcgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tocaacaagctgggccacaccaatgccagcatcatgctatttggtccagggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gatgacaaaagactgattgaaggaaaggagaggagaaagtggaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        accytgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               accgtgaactatccaccatacatttcagaagccaagggtacaggttgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                  ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                             gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                              gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctctcttctggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tocaacaagetgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                        aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                  aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                  atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                            atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                         cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                     cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                    ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                 ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggccagggctcagcctctctg
                                                                                                                                                                                                                                                                                                   ccaccaccaccaccaccaccagcaatygcaacaccgacagcaaccaatcagatatata
                    aaaaaaaaaaaa
                                     1693
1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                    1260
                                                                                                                                                                                                                                                                                                                                                                        1260
                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                       1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                              1380
                                                                                                                                                                                                                                                                                                         1320
                                                                                                                                                                                                                                                                                                                                                                                                                  1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                              1500
                                                                                                                                                                                                                     1440
                                                                                                                                                                                                                                         1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                      1620
                                                                                                                                                                           1500
                                                                  1680
                                                                                                           1620
                                                                                                                                 1560
                                                                                                                                                      1560
                                              1680
```

```
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
25-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
30-MAR-1998;
30-MAR-1998;
31-MAR-1998;
31-APR-1998;
32-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-1998;
11-MAR-1998;
11-MAR-1998;
11-MAR-1998;
12-MAR-1998;
13-MAR-1998;
17-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              secreted protein; transmembrane protein; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9946281-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PRO337 nucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRO; EST; expressed sequence tag; PCR primer; hybridisation; blood coagulation disorder; cancer; cellular adhesion disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
 98US-0079689
98US-0079786
98US-0079920
98US-0080105
98US-008015
98US-0080107
98US-0080327
98US-0080334
98US-00801071
98US-0081071
98US-0081270
98US-0081271
98US-0081271
98US-0081271
98US-0081273
98US-0081333
98US-008129
98US-00813556
98US-00813558
98US-0083336
98US-0083336
98US-0083336
98US-0083392
98US-0083392
98US-0083392
98US-0083392
98US-0083392
98US-0083392
98US-0083395
98US-0083395
98US-0083395
98US-0083395
98US-0083395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0078910.
98US-0078936.
98US-007939.
98US-0079294.
98US-0079656.
98US-0079663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0078004
98US-0040220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0077649
98US-0077791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US05028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0078886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0077450
```

```
05-MAY-1998

06-MAY-1998

06-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

13-MAY-1998

13-MAY-1998

15-MAY-1998

15-MAY-1998
                                                                                                                                                                      18-MAY-1998
22-MAY 1998
22-MAY 1998
22-MAY 1998
22-MAY 1998
22-MAY 1998
28-MAY 1998
28-MAY 1998
28-MAY 1998
30-JUL-1998
11-SEP 1998
                                                                                                                                                                                                                                                                                                                                                                      29-APR-1998;
30-APR-1998;
                                                                                                                                                          (GETH )
                                                                                                                                                           GENENTECH
                                                                                                                                                                      98US-0084639.
98US-0084643.
98US-0085323.
98US-00855339.
98US-0085579.
98US-0085582.
98US-0085582.
98US-0085699.
98US-0085700.
98US-00864700.
98US-0086414.
98US-0086486.
98US-008708.
98US-008708.
                                                                                                                                                                                                                                                                                                                           98US-008355

98US-0083742

98US-0084366

98US-0084414

98US-0084441

98US-0084600

98US-0084607

98US-0084637
                                                                                                                                                           INC.
```

Wood WI, Goddard A, Gurney A, Yuan Ç Baker KP, Chen 4

P-PSDB; WPI; 1999-551358/46. DB; AAY41773.

New secreted and transmembrane polypeptides and their polynucleotides, useful for treating blood coagulation disorders, cancers and cellular adhesion disorders -

Claim 2; Fig 221; 530pp; English

The present invention describes secreted and transmembrane polypeptides and their polynucleotides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generation of antisense sequences. They can also be used to create transgenic animals. The proteins can be used to treat a variety of diseases and disorders, depending on their function. Diseases that may be treated include blood coagulation disorders, cancers and cellular adhesion disorders. They may also be used to raise antibodies. AAZ33891 to AAZ34338, and AAY41685 to AAY41774 represent polynucleotide and polypeptide sequence given in the exemplification of the present polypeptide sequence invention.

Sequence 1679 BP; 498 A; 432 c; 419 Ü 330 <u>-</u>3 0 other;

```
Ŋ,
                                  В
                                                   Ω
В
                                                                     Query Match
Best Local S
Matches 1673
66
                  61
                                                                      Local Similarity 99.9 nes 1673; Conservative
                                  6
       atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 120
                                 atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaaaaagaagaaga
                                                                               98.1%;
99.9%;
                                                                      Score 1661.4;
Pred. No. 0;
0; Mismatches
                                                                       0;
                                                                                         DB
                                                                       <u>سر</u>
• •
                                                                                          20;
                                                                         Indels
                                                                                          Length
                                                                                           1679;
                                                                        ۲.
                                                                        Gaps
                                      65
                                                       60
                                                                          ۲.
```

```
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                       Вþ
                                                                                                                                                                                             Qy
                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                          DЪ
                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
멍
                         Qy
                                                       Вb
                                                                               Qy
                                                                                                              βb
                                                                                                                                      γQ
  1145
                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              245
                                                                                                                                            1021
                                                                                                                                                                                                                                                                                    845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                   725
                                                                                                                                                                                                                                                                                                                                                                                                                                                           665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                        965
                                                                                                                                                                                                   961
                                                                                                                                                                                                                                905
                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                           785
                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acggggctggctgtctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       attytagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cagacagacaaccaccaaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tacagcatogagatocagaacgtggatgtgtatgacgagggcccttacaccctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                         accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                              gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                       gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcttcttctggtc
                                                                                                                            tccaacaagctgggccacaaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                            gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                   aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg
ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
             ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                       gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtc
                                                                                                                                                                       tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                      tcaaaactcatcttcttccaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                             gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                     aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                             accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                   gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184
                                                                                                                                                                                                     1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    544
                                                                                                                   1084
                                                                                                                                                                           1024
                                                                                                                                                                                                                                                                                                                                                844
                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                       784
                                                                                                                                                                                                                                                                                                                                                                                                                                                              724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              604
  1204
                                                                                                                                                                                                                                 964
                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                        904
                                                                                                                                                                                                                                                                                                                                                                                                                                  780
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QV
                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1201
      08-MAR-1999
12-MAR-1999
29-MAR-1999
21-APR-1999
28-APR-1999
14-MAY-1999
23-JUN-1999
26-JUI-1999
29-OCT 1999
30-NOV-1999
30-DEC-1999
02-DEC-1999
16-DEC-1999
16-DEC-1999
30-DEC-1999
30-DEC-1999
16-DEC-1999
30-DEC-1999
16-JAN-2000
06-JAN-2000
06-JAN-2000
                                                                                                                                                                                                                                                                                                                                                    1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1445
                                                                                                                                                                                                                                                           Human PRO337 nucleotide sequence
                                                                                                                                                                                                                                                                           08-FEB-2001
                                                                                                                                                                                                                                                                                                           AAC78590
                                                                                                                                                                                                  WO200053756-A2
                                                                                                                                                                                                                                 expressed sequence
                                                                                                                                                                                                                                          Human; secreted protein; transmembrane protein;
                                                                                                                                                                   18-FEB-2000;
                                                                                                                                                                                                                                                                                                                           ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccaccaccaccaccaccacacagcaatggcaacaccgacagcaaccaatcagatatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                 actytyccaccacyycytyttytyaaacytyaaataaaaagagcaaaaaaa
                                                                                                                                                                                                                                                                                                                                                                                           atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                           cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aatactttggggggaaaagagttttaaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                   cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                           standard;
      99US-0141037

99US-0145698

99US-0162506

99W0-US28313

99W0-US28551

99W0-US28555

99W0-US31243

99W0-US31243

99W0-US31274

2000W0-US00217

2000W0-US00277
                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                   2000WO-US04341
                                                                                                                                  99US-0123957
99US-0126773
                                                                                                                                                  99WO-US05028
                                                                                                                         9908-0130232
                                                                                                          99US-0134287
                                                                                                                   99US-0131445
                                                                                                                                                                                                                                  tag;
                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                   detection; cancer;
                                                                                                                                                                                                                                                                                                            ₽P
                                                                                                                                                                                                                                                           SEQ ID
                                                                                                                                                                                                                                                            NO:522
                                                                                                                                                                                                                                             PRO;
                                                                                                                                                                                                                                             EST;
                                                                                                                                                                                                                                             cytostatic;
                                                                                                                                                                                                                                                                                                                                                       1679
                                                                                                                                                                                                                                                                                                                                                                      1675
                                                                                                                                                                                                                                                                                                                                                                                                      1620
                                                                                                                                                                                                                                                                                                                                                                                                                       1564
                                                                                                                                                                                                                                                                                                                                                                                                                                      1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1264
```

```
ρy
                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                  QУ
                                                                                                                                                                                                                    QY
                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                           맔
                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ω
                          В
                                                ρy
                                                                               В
                                                                                                     ΔÃ
                                                                                                                                    B
                                                                                                                                                             δÃ
                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 1673; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAC78458 to AAC78599 represent polynucleotide and EST (expressed sequence tag) sequences which encode secreted or transmembrane PRO polypeptides. The PRO polynucleotides and polypeptides have cytostatic activity. The polynucleotides and polypeptides can be used for detecting the presence of PRO polypeptides in samples, for linking bioactive molecules to cells and for modulating biological activities of cells, using the polypeptides for specific targeting. The polypeptide targeting can be used to kill the target cells, e.g. for the treatment of cancers. The polypeptide pairs provide specific targeting of bioactive molecules to cells. AAC78600 to AAC78987 represent PCR primers and probes used in the isolation of the PRO polynucleotide sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel PRO polypeptides and polynucleotides to target bioactive molecules to specific cellular activities \mbox{-}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ferrara
Goddard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kljavin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1679
                                                                                                                                                                                                                                                    245
                                                                                                                                                                                                                                                                                                            185
                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                    125
                            485
                                                                                 425
                                                                                                                                                                                               305
                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                               121
                                                     481
                                                                                                           421
                                                                                                                                       365
                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                           66
                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gtoottoagcaaaacagtggatttaaatotoottgcacaagcttgagagcaacacaatot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000-611443/58
                                                                                                                                    gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                           acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                       gteetteageaaaacagtggatttaaateteettgcacaagettgagageaacacaatet
                                                                              tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                              actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                    ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                          acggggctggctgctctgtgtctctttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                    aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                           atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaagaagaaga
                                                                                                                                                                                              actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                      attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                            cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                       cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Fig 221; 636pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N,
IJ,
DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB44329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENENTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĄJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AJ, Baker KP,
Filvaroff E,
Godowski PJ,
Kuo SS, Nap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 498 A; 432 C; 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KP, Botstein D, Desnoyers L, Eaton DL; f E, Fong S, Gao W, Gerber H, Gerritsen PJ, Grimaldi CJ, Gurney AL, Hillan KJ; Napier MA, Pan J, Paoni NF, Roy MA; TA, Tumas D, Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98.1%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1661.4;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>و</u>;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                330 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         s used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           in detection methods,
, and to modulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                               124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                          424
                                                                                                                                                                                                                                                                                                                                           240
    600
                              544
                                                                                                                                                                      420
                                                                                                                                                                                                    364
                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                          304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1;
```

```
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                   QV
                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VΩ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                   QΥ
                                                                                                                                                                                                          В
                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                     밁
         Q
                               B
                                                 Qy
                                                                           Вb
                                                                                            γΩ
                                                                                                                     망
                                                                                                                                         δÃ
                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                1025
                                                                                                                     1445
                                                                                                                                                                                                                                                                                                                                            1145
           1621
                                                                           1505
                                                                                                                                                                1385
                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                      1265
                                                                                                                                                                                                                                                                                                1205
                                                                                                                                                                                                                                                                                                                                                                                      1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      545
                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tocaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gactacgagtgcagtgcctccaatgacgtggccgccgccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                    tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                   aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                               ccaccaccaccaccaacaacagcaatggcaacaccgacagcaaccaatcagatatata 1260
                                                                                                                                                                                                                                                                                                                                                      ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
                             atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                   cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                  ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctcttg
                                                                                                                                                                          ggtacaatggagttttcttttcccaaacgggaagaacacaggcacacccggcttggaccca
                                                                                                                                                                                                        aatactttggggggaaaagagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                                                                                                                         ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                    ccaccaccaccaccaccaccagcaatggcaacaccgacagcaaccaatcagatatata
                                                                          cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                     1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                                    1200
                                                                                                                                                                                                                                                                                                                                                                                                              1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               664
                                                                                                                                                                                                                                                                                                                                              1204
                                                                                                                                                                                                                                                                                                                                                                                         1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     724
                                                       1620
                                                                             1564
                                                                                                   1560
                                                                                                                       1504
                                                                                                                                             1500
                                                                                                                                                                                        1440
                                                                                                                                                                                                              1384
                                                                                                                                                                                                                                    1380
                                                                                                                                                                                                                                                                               1320
                                                                                                                                                                                                                                                                                                     1264
                                   1624
```

밁

1625

1679

```
RESULT

ARAZIL471

ID AASZ

XX AASZ

XX AASZ

XX UHUMA

KW HUMA

KW DIT 24-(

XX CATA

KW CATI

FR 01-

FR 01-

FR 02-

FR 03-

FR 18-

FR 18-

FR 18-

FR 18-

FR 19-

FR 20-

FR 20-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-DEC-1999;
01-DEC-1999;
02-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-DEC-1999
30-DEC-1999
06-JAN-2000
06-JAN-2000
11-FEB-2000
18-FEB-2000
18-FEB-2000
22-FEB-2000
24-FEB-2000
24-FEB-2000
24-FEB-2000
24-FEB-2000
24-FEB-2000
30-MAR-2000
31-MAR-2000
31-MAR-2000
31-MAR-2000
31-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   breast; prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage; ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte; A-peptide; factor VIIA; gene therapy; ss.
                                                                                                                                                                                                                                                                                                                               Gerritsen Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-DEC
02-DEC
09-DEC
16-DEC
20-DEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human cDNA sequence encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAS21431 standard; cDNA; 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-MAY-
30-MAY-
02-JUN-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-DEC-2000;
                                                                                                                                      Isolated, secretory and transmembrane PRO polypeptide used to detect other PRO polypeptides, link bioactive molecules to cells expressing PRO polypeptides, and detect the presence of mammalian tumours e.g. lung, breast, prostate, cervical -
    AAS21244-AAS21518 encode for novel human secretory and transmembrane PRO polypeptides. The PRO polypeptides are useful to detect other PRO polypeptides, to link bloactive molecules to cells expressing
                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                                                                        (GETH )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4
polypeptides.
polypeptides,
                                                                                                                                                                                                                                                              2001-408281/43.
)B; AAU12359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         secretory and transmembrane; PRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -1999;
                                                                                                                                                                                                                                                                                                                                                                                                                             GENENTECH INC
                                                                                                                                                                                                                                                                                                                                 ME, Goddard
Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                             Beresini M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US00277
2000WO-US00376
2000WO-US03565
2000WO-US04341
2000WO-US04341
2000WO-US04414
2000WO-US04914
2000WO-US05004
2000WO-US05601
2000WO-US05601
2000WO-US057377
2000WO-US07377
2000WO-US07373
2000WO-US07373
2000WO-US07434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000WO-US14941.
2000WO-US15264.
2000WO-US30873.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US32678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-0170262
99WO-US30095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US31243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US30999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US30911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US28564
                                                                                           813pp;
                                                                                                                                                                                                                                                                                                                                    A, Go
Tumas
                                                                                                                                                                                                                                                                                                                               Deforge L, Desnoyers L, Filvaroïf E,
a, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z
                                                                                                English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for PR0337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mammalian; cancer; lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polypeptide
                                                                                                                                                                                                                                                                                                                                                                                 Gao
                                                                                                                                                                                                                                                                                                                                                                                 Σ.
```

```
PRO polypeptides, to modulate biological activities of cells expressing PRO polypeptides, and to detect the presence of mammalian lung, colon, breast, prostate, rectal, cervical or liver tumours by comparing PRO polypeptide expression in a cell sample to that in a control sample. Some of the 275 sequences are also useful to stimulate the release of tumour necrosis factor alpha (TNF-alpha) from human blood, the proliferation or differentiation of chondrocytes, the proliferation or gene expression in pericyte cells, the release of proceeding cells or cartilage, the proliferation of inner ear utricular supporting cells or the release of process.
                                              monocytes (PBMCS), or the proliferation of endothelial cells. Some of the PRO polypeptides may modulate glucose or free fatty acid uptake by skeletal muscle cells or by adipocytes; or inhibit binding of A-peptide to factor VIIA. The PRO polypeptides can be used in assays to identify molecules involved in binding interactions. The polynucleotides encoding PRO polypeptides can be used to generate probes, antisense RNA/DNA, transgenic or knock out animals and can be used in gene therapy.
                                                                                                                                                                                                                                                                               of T-lymphocytes, the release of a cytokine from peripheral blood
```

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 other;

۳.

```
QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                Qy
 망
                      δÃ
                                                        DЪ
                                                                                  Š
                                                                                                               Db
                                                                                                                                         Qγ
                                                                                                                                                                       Db
                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                               185
 665
                                                                                                                 545
                                                                                                                                            541
                                                                                                                                                                        485
                                                                                                                                                                                                                               425
                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                        365
                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                               305
                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                      245
                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 aaaaaaatcatgaaaaccatccagccaaaaatgcaccaattctatctctttgggcaatcttc
                            661
                                                        605
                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <del>س</del>ا
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gtocttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atcaggaaagaaagaaagaaaaaaaaccgaaoctgacaaaaaagaagaagaaaaagaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                           attytagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                    ttccccaaagctatqgacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                           acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acggggctggctctgttgtctctttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga
                                                                                                                                                                                   cagacagacaaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                            tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                             tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                     gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                    gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                                                                                                                                              actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                             actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                   ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
             ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggg
                                                                   atagoaactggtagaccagagoctaoggttacttggagacacatctctcccaaagoggtt
                                                                                                            attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                       cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                     atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1661.4;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>ب.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                     604
                                                                                                                                                                             544
                                                                                                                                                                                                       540
                                                                                                                                                                                                                                     484
                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                            304
                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    244
     724
                                                             664
```

```
QΥ
                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                        γ
                                                                                                 QУ
                                                                                                                                       Qy
                                                                                                                                                             g
                                                                                                                                                                               Qγ
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                            ρò
                                                                                                                                                                                                                                                             QY
                                                                                                                                                                                                                                                                                    Вþ
 g
                  Qy
                                        g
                                                                              B
                                                                                                                     В
                                                                                                                                                                                                                                                                                                                            1145
                                                                                                                                                                                                                                                                                                                                               1141
                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                           1025
  1625
                                         1565
                                                                                                                                          1441
                                                                                                                                                              1385
                                                                                                                                                                                  1381
                                                                                                                                                                                                      1325
                                                                                                                                                                                                                          1321
                                                                                                                                                                                                                                             1265
                                                                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                                                                     1205
                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                  965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  725
                                                                                1505
                                                                                                                      1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                         aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggggcgcgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                             gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gatgacaaaagactgattgaaggaaaggaggggggaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                              aatactttggggggaaaaagttttaaaaaagaaattgaaaaattgccttgcagatattta 1380
                                                                                                                                                                                                                                                                                                                                                                                                          tccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                  tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
          atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                       cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                 ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                       ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                     aatactttggggggaaaagagttttaaaaaagaaattgaaaattgccttgcagatattta
                                                                                                                                                                                                                                             ccaccaccaccaccaccaccaccacacagcaatggcaacaccgacagcaaccaatcagatatata 1260
atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                      ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                             ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                               cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                                                                                                                                                                                                                                                                                              1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1020
                                                                                                                                                                                                                                              1324
                                                                                                                                                                                                                                                                                                                                                                                                                                 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    784
                                          1624
                                                             1620
                                                                                 1564
                                                                                                     1560
                                                                                                                        1504
                                                                                                                                           1500
                                                                                                                                                                1444
                                                                                                                                                                                   1440
                                                                                                                                                                                                        1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
```

```
26-JUL-1999
17-AUG-1999
01-SEP-1999
08-SEP-1999
15-SEP-1999
15-SEP-1999
15-SEP-1999
01-DEC-1999
02-DEC-1999
07-DEC-1999
07-DEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; secreted protein; transmembrane protein; PRO195; PRO444; PRO185; PRO210; PRO215; PRO217; PRO242; PRO288; PRO365; PRO1361; PRO187; PRO1183; PRO1272; PRO1419; PRO4999; PRO7170; PRO248; PRO353; PRO1318, PRO1600; PRO9940; PRO533; PRO301; PRO187; PRO337; PRO1411; PRO4356; PRO246; PRO265; PRO941; PRO10096; PRO6003; PRO6004; PRO350; PRO2630; PRO6309; cell death; genetic disorder: transcent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleotide sequence of human polypeptide PRO337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-JUN-1999;
20-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200077037-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cell death; genetic disorder; transgenic animal; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US00219.
2000WO-US034341.
2000WO-US03442.
2000WO-US04414.
2000WO-US05601.
2000WO-US05841.
2000WO-US07377.
2000WO-US07377.
2000WO-US08439.
2000WO-US13358.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US14042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US20594.
99WO-US21090.
99WO-US21547.
99WO-US28313.
99WO-US28301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
134..1168
/*tag= a
/34..216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9908-0169495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US20111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0139695
99US-0145070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US28565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0149396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-0145698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRO444; PRO183;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRO1318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRO1308;
```

(GETH GENENTECH INC.

Wood WI, Zhang Ferrara N, Godowski PJ, Paoni NF, Ashkenazi l AJ, Baker N, Fong S, Roy MA, Baker KP, Botsteir ong S, Gao W, Gerbe Gurney AL, Kljavin Stewart Botstein DA, W, Gerber H, Kljavin IJ, TA, Tumas , Desnoyers L, I , Gerritsen ME, Mather JP, Napi s D, Watanabe CK, Napier MA, Par De CK, Williams Eaton DL; , Goddard Pan

WPI; 2001-050091/06. P-PSDB; AAB31204.

Isolated nucleic acid molecule encoding transmembrane polypeptide is useful for of related polypeptides a PRO polypeptide which is a gene therapy and identification

Claim 2; Fig 51; 244pp; English.

The present sequence encodes a human secreted and transmembrane polypeptide. The specification describes human polypeptides, designated PRO196, PRO444, PRO183, PRO185, PRO210, PRO215, PRO217, PRO247, PRO248, PRO365, PRO1361, PRO1839, PRO1183, PRO1272, PRO1419, PRO4999, PRO7170, PRO246, PRO353, PRO1318, PRO1600, PRO9940, PRO533, PRO301, PRO187, PRO350, PRO4356, PRO246, PRO5265, PRO941, PRO10096, PRO6003, PRO36004, PRO2603 and PRO6309. The biological activity of cells can be modulated with agents that bind to these polypeptides, resulting in the death of the cells. The polynucleotides encoding these

AAC87037
ID AAC8
XX
AC AAC8
XX
AC AAC8
XX
DT 20-1

AAC87037

standard;

CDNA;

1679 ВP

20-APR-2001 AAC87037;

(first entry)

RESULT

```
888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                          Qγ
                                                                                                                                                        밁
                                                                                                                                                                                 Qy
                                                                                                                                                                                                                Dþ
                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                      Вp
                                                                                                                                                                                                                                                                                                                             DЪ
             QΥ
                                         밁
                                                                  δÃ
                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 1673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Matc
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polypeptides are useful in the recombinant production of the polypeptides, as a hybridisation probe to screen libraries to isolate homologous sequences, or to map the gene. They may also be used for analysing genetic disorders, and to produce transgenic animals which are useful for the development and screening of therapeutically useful reagents. The polynucleotides can also be used in gene therapy e.g. to replace a defective gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1679 BP; 498 A; 432 C;
                                                                                                                                                                                                                                                                                                                                485
                                                                                                                                                                                                                                                                                                                                                                                                                                             365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                      425
                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          125
                                                                                                                                                                                                                                                                        545
                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
              841
                                          785
                                                                     781
                                                                                                  725
                                                                                                                             721
                                                                                                                                                          665
                                                                                                                                                                                      661
                                                                                                                                                                                                                   605
                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gtocttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaaacacaatct
                                                                                                                                                                                                                                                                                                                                                                                                                                         gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttggg\alphaaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaaaaatoatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acggggctggctgtctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                              atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                      attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                          cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                  tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                      accgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                              gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                      ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                 atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                        attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                   tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                 gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                         ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                         accytgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1661.4;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>(</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     330 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               184
                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                         484
                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304
                                             844
                                                                                                                                                             724
                                                                                                                                                                                                                     664
                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                            604
                                                                                                                                                                                                                                                                                                                                   544
                                                                                                     784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۳.
```

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Вþ
                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                            Qγ
                                                                                                                                                                                     멍
                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                      γQ
                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                            맑
                                                                  Qy
                                                                                           망
                                                                                                               Q
                                                                                                                                       뫄
                        δÃ
                                              밁
  gg
                                                                                                                                                                                                                                                                                                                                                                        1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1025
                                                                                                                                                                                                                                   1325
                                                                                                                                                                                                                                                        1321
                                                                                                                                                                                                                                                                                1265
                                                                                                                                                                                                                                                                                                                                                                                                                     1085
                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                      1385
                                                1565
                                                                     1561
                                                                                             1505
                                                                                                                                         1445
                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         845
                                                                                                                   1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                             tocaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcggccgtcagc 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tcaaaactcatcttcttccaatgtctcttgaacatgactatgggaactacacttgcgtggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc
                                                                                                                                                                                                                              ccaccaccaccaccaccacacacagcaatggcaacaccgacagcaaccaatcagatatata 1260
                                                                                                                                                                                                                                                                                                                                                                     ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                   ttgcaccttgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg
                                                                                                                                                                                                                                                                                                                                                                                                                 gaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgctcttcttggtc
                                                                                                                                                                                                                                                                                                                                                                                                                             tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc
ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca
                                                                                                                                                                                                                                                                              atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                         atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                    cccaragagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                                                                                                                                       ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                   ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg
                                                                                                                                                                                    ggtacaatggagttttcttttcccaaacgggaagaacacagcaccccggcttggaccca
                                                                                        cccacagagtgcccccacgtggaacattctggagctggccatcccaaattcaatcagtcc
                            1675
       1679
                                                                                                                                                                                                                                                                                                                                                                             1204
                                                                                                                                                                                                                                                                                                                                                                                                    1200
                                                                                                                                                                                                                                                                                                                                                                                                                         1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                               1504
                                                                                                                                                                   1500
                                                                                                                                                                                           1444
                                                                                                                                                                                                                                                                                    1324
                                                                          1620
                                                                                                 1564
                                                                                                                        1560
                                                                                                                                                                                                                  1440
```

```
RESULT
AAA88791
IID AAA8
XX AAA1
XX AAA1
XX Huma
XX Huma
XX SEC:
XX SEC:
XX Hom
XX Hom
XX Key
FT CDS
               Key
CDS
                                                                                                                 AAA88791
                                      Homo
                                                                                  19-FEB-2001
sig_peptide
                                                                    Human
                                                     SECX;
                                                                                                                               o
                                                    human;
                                                                   SECX cDNA Clone 11753149.0.37
                                                                                                                  standard;
                                                     diagnosis;
                                                                                   (first entry)
 /*tag=
              Location/Qualifiers 501..1535
                                                                                                                  cDNA;
                                                     gene
                                                                                                                  2012
                                                     therapy;
                                                                                                                  ВÞ
                                                      cell adhesion;
```

```
Qy
                                              В
                                                                                                                              δÃ
                                                                                                                                                               рь
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                            QY
                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                        Qy
                                                                                                      В
                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 1638;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is that of SECX Clone 11753149.0.37, which resembles rat neural cell adhesion molecule neurotrimin and human opioid binding protein/cell adhesion molecule OBCAM. The clone was initially identified in human foetal brain tissue. The invention provides novel SECX polynucleotides (see AAA88789-804) and the secreted or membrane-associated proteins encoded by them (see AAB1720-34). SECX polynucleotides, polypeptides and antibodies can be used in the detection, diagnosis and treatment (including gene therapy) of a broad range of pathological states.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SECX polypeptides and the nucleic acids that encode them, useful for diagnosing, preventing and treating e.g. cancers, inflammation, arthritis and immunological disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-APR-1999; 99US-0128514.
03-MAR-2000; 2000US-0128514.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-APR-2000; 2000WO-US09392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2012 BP; 567 A; 503 C; 512 G; 430 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 14; Fig 3; 143pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-679487/66.
P-PSDB; AAB19722.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fernandez E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200061754-A2
                                                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                    492
                 421
                                              732
                                                                        361
                                                                                                       672
                                                                                                                                   301
                                                                                                                                                                612
                                                                                                                                                                                              241
                                                                                                                                                                                                                           552
                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                   سو
tacagcatcgagatccagaacgtggatgtgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                 aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc 180
                                                                                                                                                                                                                                                                                                                                                          atcaggaaagaaagaaagaaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 120
                                                                                                                                                                                                                                                                                                                                                                                                                   gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                     actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                 ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                           acggggctggctgtctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                            atcaggaaagaaagaaag-aaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga
                                                                                                                                                                                                                                                                                                                                                                                                    gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                          gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcag
                                                                                                                                                                                                                          acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                   aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                           gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                      actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vernet C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= b
600..1532
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96.0%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shimkets R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1625.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 21; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2; * Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2012;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                 491
                                                                                                                                                                                                                                                                                                                                                                                                          432
                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                        551
                    480
                                               791
                                                                             420
                                                                                                          731
                                                                                                                                        360
                                                                                                                                                                     671
                                                                                                                                                                                                                              611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>-</u>-
```

Qy Db	Qy Db	Qy Db	Qy Db	Qy Db	Qу	Qy Db	QУ	Qy Db	Qy Db	Qy	Qy Db	Qy Db	Qy Db	Qу Db	Qy Db	Qy Db	Qy Db	Вb
1501 1872	1441 1812	1381 1752	1321 1692	1261 1632	1201 1572	1141 1512		1021 1392	961 1332	901 1272	841 1212	781 1152	721 1092	661 1032	01 72	541 a 912 a	481 852	792
. cccacagagtgccccacgtggaacattctggagctggccatcccaaattcaatcagtcc 1 	ctgcaagctgcatcgtgcaacctctttggtgccagtgtgggcaagggctcagcctctctg 1	ggtacaatggagttttcttttcccaaacgggaagaacacagcacacccggcttggaccca 1 	aatactttggggggaaaaagttttaaaaaagaaattgaaaattgccttgcagatatta 1 	caaatgaaattagaagaaacacagcctcatgggacagaaatttgagggagg	coaccaccaccaccacacacagcaatygcaacaccyacagcaaccaatcagatatata 1	ttgcacctgcttctcaaattttgatgtgagtgccacttccccacccgggaaaggctgccg 1	gaggtgagcaacggcacgtcgaggaggcaggctgcgtctggctgctgctgcctcttctggtc 1	tocaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgcggtcagc l	tcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcc 10 	gatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctc 96 	aaggggacaotgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag 90 	tccccgtgggacaa 8 tccccgtgggacaa 1	gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggaggtaaaggtc 78	tcaggg 7 tcaggg 1	atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt 66 	attgtagagatttetteagatateteeattaatgaagggaacaatattageeteacetge 60	cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa 54 	ctcggtg 8
560 931	500	440 811	380	9 12		200 571	140 511	080 451)20 391		71			0 91	31	1 0	1	_

```
ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
        δÃ
                                 Query
Best I
                          Matches 1601;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1992
                                                                                         The present sequence is that of SECX Clone 11753149.0.6, which resembles rat neural cell adhesion molecule neurotrimin and human opioid binding protein/cell adhesion molecule OBCAM. The clone was initially identified in human foetal brain tissue. The invention provides novel SECX polynucleotides (see AA88789-804) and the secreted or membrane-associated proteins encoded by them (see AAB19720-34). SECX polynucleotides, polypeptides and antibodies can be used in the detection, diagnosis and treatment (including
                                                                                                                                                                                                                                                                                                                                                                                                                   Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SECX; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA88790 standard;
                                                                                                                                                                                                                                                                                                                                                                       mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                         sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human SECX cDNA Clone 11753149.0.6
                                                                                                                                                                                                                                                                                     09-APR-1999; 99US-0128514
03-MAR-2000; 2000US-0128514
                                                                                                                                                                                          SECX polypeptides and the nucleic acids that encode them, useful for diagnosing, preventing and treating e.g. cancers, inflammation, arthritis and immunological disorders -
                                                                                                                                                                                                                                                                                                              07-APR-2000; 2000WO-US09392
                                                                                                                                                                                                                                                                                                                               19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                WO200061754-A2
                                                                  Sequence 1603 BP; 466 A; 422 C; 405 G; 310
                                                                                                                                                                        Claim 14; Fig 2; 143pp; English
                                                                                                                                                                                                                          P-PSDB; AAB19721.
                                                                                                                                                                                                                                                    Fernandez
                                                                                                                                                                                                                                                                    (CURA-) CURAGEN CORP
         38
                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7
                                         Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           actgtgccaccacggcgtgtg 1641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  actgtgccaccacggcgtgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atagagacgaacagaatgagaccttccggcccaagcgtggcgctgcgggcactttggtag 1991
                                                                                   therapy) of a broad
         2000-679487/66.
and
                                                                                                                                                                                                                                                    Ħ
                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnosis; gene therapy; cell adhesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                    Vernet C,
                                                                                                                                                                                         immunological disorders
                                                                                                                                                                                                                                                                                              99US-0128514
                                                                                                                                                                                                                                                                                                                                                                                         /*tag=
92..190
                                                                                                                                                                                                                                                                                                                                                                         /*tag= b
191..1123
                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers 92..1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA;
                                 93.8%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                  ь
                                                                                                                                                                                                                                                                                                                                                                                                   ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1603
                                                                                    range of pathological states.
                                                                                                                                                                                                                                                     Shimkets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2012
                          0;
                                  Pred.
                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                           Mismatches
                                  No.
                                         1588.8;
                                  0;
                                                                    Τ,
                                           DB
                                                                     0 other;
                          2;
                                          21;
                           Indels
                                          Length 1603;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ss.
                                                                                                       antibodies
                          1;
                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1620
                          1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                 δã.
                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                   QΨ
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                              QY
                                                                                                                                                      δÃ
                                                                                                                                                                        В
                                                                                                                                                                                        Qy
                                                                                                                                                                                                           밁
                                                                    밁
                                                                                   Qγ
                                                                                                     밇
                                                                                                                     Qy
                                                                                                                                       g
  밁
                Qy
                                 В
                                                 QY
  1080
                  1118
                                  1020
                                                   1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             218
                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                 578
                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                  518
                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                       398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              158
                                                                     960
                                                                                     998
                                                                                                      900
                                                                                                                       938
                                                                                                                                        840
                                                                                                                                                        878
                                                                                                                                                                        780
                                                                                                                                                                                          818
                                                                                                                                                                                                           720
                                                                                                                                                                                                                           758
                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                              869
                                                                                                                                                                                                                                                                                                                                                                                                    458
                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
```

```
Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300 accgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          attotatotottgggcaatottoacggggctggctgctctgtgtctcttccaaggagtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                attctatctctttgggcaatcttcacggggctggctgttctgtgtctctttccaaggagtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaaaaagaagaaaaaagaagaagaaaaaaaatcatgaaaaccatccagccaaaaatgcaca 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggtccggcagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggtccggcagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agggcccttacacctgctcggtgcagacagacaaccacccaaagacctctagggtccacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 accgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggctaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggctaa
ggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agggcccttacacctgctcggtgcagacagacaaccacccaaagacctctagggtccacc
                                                                                                   tatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcg
                                                                                                                                                            atgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccagcatcatgc
                                                                                                                                                                                 atgggaactacacttgcgtggcctccaacaagctgggccacacccaatgccagcatcatgc
                                                                                                                                                                                                                                            aagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgact
                                                                                                                                                                                                                                                             aagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgact
                                                                                                                                                                                                                                                                                                                                             gtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccct
                                                                                                                                                                                                                                                                                                                                                                                                                         gtacaggtqtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccct 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccgtggtacggagagtaaaggtcaccgtgaactatccaccattacattcagaagccaagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgcgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gacacatctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gacacatctctcccaaagcggttggctttgtgagtgaagacgaatacttgggaaattcagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacg
                                                                              tatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcg
                                                                                                                                                                                                                                                                                                                      59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   239
          1139
                                                                                                                                                                    1019
                                                                                                                                                                                                          1057
                                                                                                                                                                                                                                                                                                                                 899
                                                                                                                                                                                                                                                                                                                                                                       937
                                                                                                                                                                                                                                                                                                                                                                                                               839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   757
                                                                                      1079
                                                                                                                                                                                                                                                  959
                                                                                                                                                                                                                                                                                        997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     817
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13.20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1178
                                                                                                                      21-JAN-2000;
25-APR-2000;
09-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                   14-SEP-2000;
19-OCT-2000;
29-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1440
  Tang
Wang
Zhao
                                                                                                                                                                                                                                                                Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                   AAI57869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12:98
                                                                                                  19-JUL-2000;
03-AUG-2000;
                                                                                                                                                                                        26-JUL-2001
                                                                                                                                                                                                             WO200153312-A1
                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                       22-OCT-2001
                                             (HYSE-)
                                                                                                                                                                    26-DEC-2000;
                                                                                                                                                                                                                                                                                                 peripheral nervous system;
                                                                                                                                                                                                                                                        leukaemia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tocccaccgggaaaggctgccgccaccaccaccaccacacaaagcaatggcaacacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tggcgctgcgggcactttggtagactgtgccaccacggcgtgtg 1641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gocatcocaaattcaatcagtccatagagacgaacagaatgagaccttccggcccaagcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acagcacacccggcttggacccactgcaagctgcatcgtgcaacctctttgctgccagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gaaaattgccttgcagatatttaggtacaatggagttttcttttcccaaacgyggaagaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aaatttgagggaggggaacaaagaatactttggggggaaaaaagttttaaaaaaagaaatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gacagcaaccaatcagatatatacaaatgaaattagaagaaacacagcctcatgggacag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gccatcccaaattcaatcagtccatagagacgaacagaatgagaccttccggcccaagcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgggcaagggctcagcctctctgcccacagagtgcccccacgtggaacattctggagctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tgggcaagggctcagcctctctgcccacagagtgcccccacgtggaacattctggagctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acagcacacccggcttggacccactgcaagctgcatcgtgcaacctctttggtgccagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gaaaattgccttgcagatatttaggtacaatggagttttctttttccaaacgggaagaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaatttgagggagggaacaaagaatactttggggggaaaagagttttaaaaaaagaatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gacagcaaccaatcagatatatacaaatgaaattagaagaaacacagcctcatgggacag
  ΛΥΙ΄,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      tggcgctgcgggcactttggtagactgtgccaccacggcgtgtg
                                                                                                                                                                                                                                                                                                                                 polynucleotide SEQ ID NO 72.
                                                                                                                                                                                                                                                                                                 nootropic; immunosuppressant; cytostati
eral nervous system; neuropathy; central
                                             HYSEQ
 Liu (
Wang i
Zhou
                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                  2000US-0488725.
2000US-0553317.
2000US-0598042.
2000US-0520312.
2000US-0663450.
2000US-0663450.
2000US-0693036.
2000US-0727344.
u C,
u P,
                                                                                                                                                                                                                                                                                                                                                       (first
                                                                                                                                                                   2000WO-US34263
                                              INC.
  Asundi V, Cl
Wehrman T, 1
, Goodrich R,
                                                                                                                                                                                                                                                                                                                                                                                                   cDNA;
                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                   1678
           Chen R,
                                                                                                                                                                                                                                                                                                                                                                                                   ВΡ
    Drmanac
                                                                                                                                                                                                                                                                                                           cytostatic;
             Xue
                     Ма
 Y,
AJ,
RT;
                         Qian
             Yang
                                                                                                                                                                                                                                                                                                  nervous system;
                                                                                                                                                                                                                                                                                                              gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1603
             gχB,
                                                                                                                                                                                                                                                                                                 therapy; cancer; system; CNS;
                       Ren F,
              J
                         Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1199
                         ņ
```

Matches 1456; Query Match Best Local

Similarity

99.9%;

Pred. Score 1455.4; Pred. No. 0; Mismatches

В

Length 1678; 0,

Conservative

0;

۲. 22;

Indels

Gaps

0;

```
The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities enoch as Termino system disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                              utilisation of the activities such as: Immune system suppression, activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P-PSDB; AAM38713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-442253/47.
Sequence 1678
                                                                                                                                                                                               specification
                                                                                                                                                                                                                            .N.S disorders.
ote: The sequence data
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    as central nervous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 72; 10078pp; English.
         BP;
         420
         A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polypeptides, useful for treating disorders system injuries - % \left\{ 1\right\} =\left\{ 1
                                                                                                                                                                                                                                                                                     for this patent did not form part of the printed
                   468
         Ç;
         451 G;
                            339
                   Ή.
                            0
```

```
γQ
                                                       밁
                                                                              QV
                                                                                                          В
                                                                                                                                 QΨ
                                                                                                                                                             Вр
                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                          QY
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δλ
  밁
                                                                                                                                                                                                                                           510
                                                                                                                                                                                                                                                                    462
                                                                                                                                                                                                                                                                                             450
                                                                                                                                                                                                                                                                                                                       402
                                                                                                                                                                                                                                                                                                                                                 390
                                                                                                                                                                                                                                                                                                                                                                           342
                                                                                                                                                                                                                                                                                                                                                                                                   330
                                                                                                                                                                                                                                                                                                                                                                                                                              282
                                                                                                                                                                                                                                                                                                                                                                                                                                                        270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              210 aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt
  762
                                                                                                          642
                                                                                                                                                             582
                                                                                                                                                                                       570
                                                                                                                                                                                                                 522
                                                       702
                            750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt
                                                                                                                                                                                                                                                                               cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 449
                                                                                                                                                                                                                                                                                                                                                                                     ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                        coggcagggggagagogccaccctcaggtgcactattgacaaccogggtcaccogggtggc
            ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                  aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                      taatgaagggaacaatattagcctcacctgcatagcaacctggtagaccagagcctacggt 629
                                                                                                                                                                                                              ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                            ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat 569
                                                                                                                                                                                                                                                                   cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                                                                                                                                                                                         ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                            ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc
ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                     aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                                                             taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                                                          269
                                                                                                                                                                                                                                                                                                                          461
                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                           329
                                                                                                                                                                                                                                                                       521
                                                                                                                                                                                                                                                                                                                                                                                                     389
                                                                                                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281
                              809
                                                        761
                                                                                 749
                                                                                                                                     689
                                                                                                                                                               641
                                                                                                                                                                                                                                                                                                 509
                                                                                                           701
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΨ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VΩ
      XXX DE XXX
                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                                                                            QΥ
                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                   AAI59655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1062
Human; nootropic; immunosuppressant; cytostatic; gene therapy; peripheral nervous system; neuropathy; central nervous system;
                                                                                                                                                                                                                                    1662
                                                                                                                                                                                                                                                                                                 1602
                                                                                                                                                                                                                                                                                                                                                                                                                             1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1002
                                                 Human polynucleotide SEQ ID NO 3644
                                                                                   22-OCT-2001
                                                                                                                  AAI59655;
                                                                                                                                                  AAI59655 standard;
                                                                                                                                                                                                                                                                                                                                                                                                1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       810
                                                                                                                                                                                9
                                                                                                                                                                                                                                cgtgaaataaaaagagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gcaacaccgacagcaaccaatcagatatatacaaatgaaattagaagaaacacaggcctca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gtgccacttccccacccgggaaaggctgccgccaccaccaccaccaccaacagcaatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aggctgcgtctggctgctgcctcttctggtcttgcacctgcttctcaaatttcgatgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agccaagggtaccaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                               cgtgaaataaaaagagc
                                                                                                                                                                                                                                                                                            cccaagcgtggcgctgcgggcactttggtagactgtgccaccacggcgtgtgttgtgaaa
                                                                                                                                                                                                                                                                                                              cccaagcgtggcgctgcgggcactttggtagactgtgccaccacggcgtgtgttgtgaaa 1649
                                                                                                                                                                                                                                                                                                                                                                               tggagctggccatcccaaattcaatcagtccatagagacgaacagaatgagaccttccgg
                                                                                                                                                                                                                                                                                                                                                                                                                           tgccagtgtgggcaagggctcagcctctctgcccacagagtgcccccacgtggaacattc
                                                                                                                                                                                                                                                                                                                                                                                                                                              tgccagtgtgggcaagggctcagcctctctgcccacagagtgcccccacgtggaacattc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ggaagaacacagcacccggcttggacccactgcaagctgcatcgtgcaacctctttgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggaagaacacagcacacccggcttggacccactgcaagctgcatcgtgcaacctctttgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aagaaattgaaaattgccttgcagatatttaggtacaatggagttttcttttcccaaacg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aagaaattgaaaattgccttgcagatatttaggtacaatggagttttcttttcccaaacg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tgggacagaaatttgagggaggggaacaaagaatactttgggggggaaaagagttttaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tgggacagaaatttgagggagggaacaaagaatactttggggggaaaaaagttttaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gcaacaccgacagcaaccaatcagatatatacaaatgaaattagaagaaacacagcctca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gtgccacttccccacccgggaaaggctgccgccaccaccaccaccaccaccaccagcaatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattttgatgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    catcatgctatttggtccaggcgtcagcgaggtgagcaacggcacgtcgaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    catcatgotatttggtccaggcgccgtcagcgaggtgagcaacggcacgtccaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga;gcctcagc
                                                                                                                                                                                                                                                                                                                                                            tggagctggccatcccaaattcaatcagtccatagagacgaacagaatgagaccttccgg
                                                                                 (first entry)
                                                                                                                                                  cDNA;
                                                                                                                                                                                                                                  1678
                                                                                                                                                                                                                                                                1666
                                                                                                                                                  1690
                                                                                                                                                  ΒP
   cancer;
                                                                                                                                                                                                                                                                                               . 1661
                                                                                                                                                                                                                                                                                                                                                                                                                             1541
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .1349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1001
                                                                                                                                                                                                                                                                                                                                                                                             1589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1049
                                                                                                                                                                                                                                                                                                                                                              1601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1169
```

```
Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                         Tang
                                                                                                                                                                                                                                     03-AUG-2000;
                                                                                                                                                                                                                                             09-JUL-2000;
19-JUL-2000;
                                                                                                                                                                                                                                                          21-JAN-2000;
25-APR-2000;
                                                                                                                                                                                                                                                                                           26-JUL-2001
                                                                                                                                                                                                      (HYSE-) HYSEQ INC
                                                                                                                                                                                                                   29-NOV-2000;
                                                                                                                                                                                                                                                                              26-DEC-2000;
                                                                                                                                                                                                                                                                                                        WO200153312-A1
                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                   leukaemia; ss.
                                                                                                                                                                                                                                14-SEP-2000;
                                                                                                                                                                           Wang Z,
Zhou P,
                                                                                                                                                                                                                  2000US-0653450.
2000US-0662191.
2000US-0693036.
2000US-0727344.
                                                                                                                                                                                                                                            2000US-0598042
2000US-0620312
                                                                                                                                                                                                                                                                             2000WO-US34263
                                                                                                                                                                                                                                                          2000US-0552317
                                                                                                                                                                                                                                                                2000US-0488725
                                                                                                                                                                                  Asundi V,
Wehrman T,
                                                                                                                                                                                 Chen R,
                                                                                                                                                                            hen R, Ma Y,
Xu C, Xue AJ,
Drmanac RT;
                                                                                                                                                                                        Qian
                                                                                                                                                                                   gχB,
                                                                                                                                                                                   Ren F
                                                                                                                                                                                         Wang D;
```

P-PSDB; AAM40499 l nucleic acids and polypeptides, useful as central nervous system injuries for treating

disorders

Zhao

QA,

Goodrich R,

Ç,

2001-442253/47

Claim 1; SEQ ID NO 3644; 10078pp; English.

Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/Inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, and the feature of the state of the The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide in gene therapy a composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous containing a polyperal nervous containing system, such as peripheral nervous injuries, peripheral neuropathy localised neuropathies and central nervous system diseases, such as .N.S disorders The sequence for receptor activity, arthritis and inflammation, leukaemias data for this patent did not form of the printed and

specification part

Sequence 1690 BP; 482 A; 416 C; 425 G; 367 T; 0 other;

DВ

22;

Length

1690;

4.

```
δÃ
                                                      20
                                                                                                                Qγ
                            B
                                                                                    밁
                                                                                                                                                                        Q
                                                                                                                                              밁
                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                        Matches
   181
                              465
                                                                                      406
                                                                                                                                              346
                                                         121
                                                                                                                61
                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                          gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                           aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                      aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                   atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaaaaaagaagaaga
                                                                                                                atcaggaaagaaagaaaaaaaaaccgaacctgacaaaaaagaagaagaagaaga 120
                                                                                                                                           gtcctlcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                    76.6%;
99.6%;
                                                                                                 0,
                                                                                                                                                                                                                    Score 1297.4;
Pred. No. 0;
                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                      1;
                                                                                                                                                                                                        Indels
                                                                                                                                                                                                        4.
                                                                                                                                                                                                      Gaps
                                                                                    464
240
                            524
                                                        180
                                                                                                                                              405
                                                                                                                                                                           60
```

```
1259
                                                                                                                                            1484
                                                                                                                                                                                                                       1424
                                                                                                                                                                                                                                                                                                       1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1005
                                                                                                                                                                                                                                                                                                                                             1019
                                                                                                                                                                                                                                                               1079
                                                                                                                                                                                                                                                                                                                                                                                       1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           525
                                                                                                                                                                                                                                                                                                                                                                                                                             959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
gactacgagtgcagtgcctccaatgacgt-ggccgcgcccgt-ggtacggagagtaaagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcågtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cagacagacaaccaacccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                             tcttgcacctgcttctcaaattttgatgttgagtgccacttccccacccgggaaaggctgc
                                                                                                                                                                                                                                            gcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcttcttgg
                                                                                                                                                                                                                                                                                                                            cctccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtca
                                                                                                                                                                                                                                                                                                                                                                                                          aggatgacaaaagactgatt-aaggaaagaaaggggtgaaagtggaaaacagacctttcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aggatgacaaaagactgattgaaggaaagaaggggtgaaagtggaaacagacctttcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aaaaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tcaccgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gactacgagtgcagtgcctccaatgacgtgggccgcgccgtgggtacggagagtaaagg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                          cyccaccaccaccaccaccaccaccagcaatggcaacaccgacagcaaccaatcagatata
                                                                                                                                                                                                                       gcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctgcctcttctgg
                                                                                                                                                                                                                                                                                                     cctccaacaagctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtca
                                                                                                                                                                                                                                                                                                                                                                                   teteaaaaeteatettetteaatgtetetgaacatgaetatgggaaetaeaettgegtgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tcaccgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtgggac
                                                                                                  cyccaccaccaccaccaacacaacagcaatyycaacaccyacaycaaccaatcayatata
                                                                                                                                        tettgeacetgetteteaaattttgatgtgagtgeeactteeceaceegggaaaggetge
                    1318
                                                            1603
                                                                                                                                            1543
                                                                                                                                                                                1198
                                                                                                                                                                                                                          1483
                                                                                                                                                                                                                                                                                                       1423
                                                                                                                                                                                                                                                                                                                                               1078
                                                                                                                                                                                                                                                                                                                                                                                       1363
                                                                                                                                                                                                                                                                                                                                                                                                                               1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          884
                                                                                                    1258
```

Q Db Ωy Вb Qy Дb δÃ Вþ

밁

₽ γQ

8 망 δÃ. B Q В Qy 뫄 Qy 멍 δÃ 망 Ş 밁 δÃ

Дb Qγ 밁 δÃ

61

gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa

120 249 60

atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg

atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg

190

Query Match
Best Local Similarity
Matches 1032; Conserv

Conservative

0;

Mismatches

0;

0; Gaps

0

61.0%;

Score 1032; DB 21; Pred. No. 5.6e-250;

Length 1032; Indels

QΥ

Qy

В

Qγ

В

ğ Db Š 밁

밁

```
RESULT 1
AAZ47892
 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disorders, and neurological diseases. The novel protein is expected of having haematopoietic cell regulatory activity, tissue generation/reparation activity, activin/inhibin activity, taxis/chemotaxis activity,
                                                                                                                                             New polypeptides of human generation, coagulant and
                                                                                                                                                                                             WPI;
                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                              activin; inhibin;
receptor; ligand;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA247892 standard;
Sequence 1032
                                                                   The present sequence encodes a specifically claimed novel human if the novel human protein can be used in therapeutic drugs for the prevention and treatment of a broad range of disorders including autoimmune and infection-related immunodeficiency, inflammatory
                      blood coagulation
                                                                                                                         Claim 4; Page 41; 84pp; Japanese.
                                                                                                                                                                                  P-PSDB;
                                                                                                                                                                                                                 Fukushima D,
                                                                                                                                                                                                                                       (ONOY ) ONO PHARM CO
                                                                                                                                                                                                                                                              14-MAY-1998;
                                                                                                                                                                                                                                                                                     13-MAY-1999;
                                                                                                                                                                                                                                                                                                           18-NOV-1999
                                                                                                                                                                                                                                                                                                                                WO9958668-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                  inflammatory disorder; neurological disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agaatactttggggggaaaaaagtttt 1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  agaatactttggggggaaaagagtttt 1690
                                                                                                                                                                                             2000-062298/05
                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    haematopoietic cell regulation;
                                                                                                                                                                                  AAY57601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         encoding cDNA
 ₿P;
                                                                                                                                                                                                                 Shibayama
                                                                                                                                                                                                                                                              98JP-0131815
                                                                                                                                                                                                                                                                                     99WO-JP02485
                                                                                                                                                                                                                                                                                                                                                                             1..1032
                                                                                                                                                                                                                                                                                                                                                       /note= "no stop codon
                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                             etic cell regulation; tissue generation; reparat taxis; chemotaxis; blood coagulation; thrombus; autoimmune; infection-related immunodeficiency;
 267
                      and thrombus activity, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cDNA;
                                                                                                                                                                                                                                        LTD.
 A:
                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1032
 281
                                                                                                                                               origin having cell regulatory, tissue other activities -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ
                                                                                                                                                                                                                   Tada
 Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뗭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ID
 270 G;
                                                                                                                                                                                                                 н;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NO:2.
                                                                                                                                                                                                                                                                                                                                                       given"
 214
 Ψ,
                      receptor/ligand activity.
  0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     reparation;
                                                                                                      protein.
```

```
RESULT 1
AAZ47894
ID AAZ4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
X D X A X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    νQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                               В
                                                                                                                                                       δõ
                                                                                                                                                                                  Дb
                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                          QΥ
                                                                                                                                                                                                                                                                                       дb
                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                            Ър
                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                 DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                               1021
            10-MAR-2000
                                                                                                                                                         1150
                                     AAZ47894;
                                                              AAZ47894
                                                                                                                                                                                                             1090
                                                                                                                                                                                                                                                                1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     370
                                                                                                                                                                                    961
                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                   970
                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                          850
                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                               cttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agtgaagacgaatacttggaaattcagggcatcacccggggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aagtggtgcctggatcctcgcgttggtccttctgagcaacaccccaaacgccagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                         cttctcaaattt
                                                                                                                                                                                                aacggcacgtcgaggagggcaggctgcgtctgggctgctgctcttctggtcttgcacctg
                                                                                                                                                                                                                                    ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                  aacggcacgtcgaggagggcaggctgcgtctggctgctgctcttctggtcttgcacctg
                                                                                                                                                                                                                                                                                                       atcttcttcaatgtctctgaacatgactatgggaactacacttgcgttggcctccaacaag
                                                                                                                                                                                                                                                                                                                                            agactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                       agactgattgaaggaaaggagaggggtgaaagtggaaaacagacctttcctctcaaaactc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaagggggaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tgcagtgcctccaatgacgtggccgcgcgcgtggtacggaggtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tgcagtgcctccaatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaac
                                                                                                                                                                                                                                                               ctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcgaggtgagc
                                                                                                                                                                                                                                                                                       atcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaag
                                                                                                                                                                                                                                                                                                                                                                                                 ctgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                    tatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggaca
                                                               standard;
            (first entry)
                                                               cDNA;
                                                               939
                                                               ВP
                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     429
                                                                                                                                                                                                                                                                                                                  1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                          909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            309
                                                                                                                                                                                    1020
                                                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
```

Qy Db

241 523 181 463

Ď,

301

gtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaagggaac

agcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacgagggcactctagggctgcacctcatt

522 300

240

0

```
Qy
                                             밁
                                                                      Qy
                                                                                                   Дb
                                                                                                                             Qγ
                                                                                                                                                           g
                                                                                                                                                                                                                                                                                             ρy
                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 939; Conserv
                                                                                                                                                                                                                                                                                                       autoimmune and infection-related immunogericieus, ....-autoimmune and infection-related immunogericieus, is expected disorders, and neurological diseases. The novel protein is expected having haematopoietic cell regulatory activity, tissue generation/reparation activity, activin/inhibin activity, taxis/chemotaxis activity activity, activity, and receptor/ligand activity blood coagulation and thrombus activity, and receptor/ligand activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; haematopoietic cell regulation; tissue generation; reparat activin; inhibin; taxis; chemotaxis; blood coagulation; thrombus; receptor; ligand; autoimmune; infection-related immunodeficiency;
                                                                                                                                                                                                                                                                                                                                                                                                           The
The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polypeptides of human origin having cell regulatory, tissue generation, coagulant and other activities -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human protein encoding
                                                                                                                                                                                                                                                                                           Sequence 939 BP;
                                                                                                                                                                                                                                                                                                                                                                                               prevention and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fukushima D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9958668-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ONOY ) ONO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inflammatory disorder; neurological disease; ss.
                                                                        343
                                                                                                                                283
                                                                                                                                                                                         223
                403
                                             121
                                                                                                     61
                                                                                                                                                            ...ا
                                                                                                                                                                                                                                                                                                                                                                           present sequence encodes a specifically claimed novel human protein can be used in therapeutic drugs for the vention and treatment of a broad range of disorders including commune and infection related immunodeficiency, inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000-062298/05
DB; AAY57602.
agcaacacccaaacgcagtacagcatcgagatccagaacgtgggatgtgtatgacgagggc
                                                          agcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtccttctg
                                                                                                                 agcgccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggctaaaccgc 342
                                                                                                                                                           cgcagcggagatgccaccttccccaaagctatggacaacgtgacggtccggcagggggag
                                                                                                                                                                          cgcagcggagatgccaccttccccaaagctatggacaacgtgacggtccggcagggggag
                                          agcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtccttctg
                                                                                                  agegeeacceteaggtgeactattgaeaacegggteaceegggtggeetggetaaacege
                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; Page 48; 84pp; Japanese
                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PHARM CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shibayama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98JP-0131815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-JP02485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
1..939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag=
                                                                                                                                                                                                                                                                                           245 A;
                                                                                                                                                                                                                                55.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "no stop codon
                                                                                                                                                                                                                                                                                             255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tada
                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                           Ç
                                                                                                                                                                                                                                Score 939;
Pred. No.
                                                                                                                                                                                                                                                                                                                     activity, and receptor/ligand activity.
                                                                                                                                                                                                                                                                                           249 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IJ
                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ξ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO:5
                                                                                                                                                                                                                                                                                           190 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            given"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tissue generation; reparation;
                                                                                                                                                                                                                                  1.4e-226;
                                                                                                                                                                                                                                               DB
                                                                                                                                                                                                                                                 21;
                                                                                                                                                                                                                                                                                             0 other;
                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                     activity,
                                                                                                                                                                                                                                                                                                                                                                                                                           protein.
                                                                                                        120
                                                                                                                                                              60
                462
                                              180
                                                                           402
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ОÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ОÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              д
antiulcer; osteopathic; neuroprotective; nootropic; antipsoriatic; cerebroprotective; anticonvulsant; antidepressant; gene therapy; vaccine; autoimmune disorder; multiple sclerosis; allergic condition; insulin dependent diabetes; asthma; myeloid cell deficiency; ulcer; lymphoid cell deficiency; burn; osteoporosis; osteoarthritis; central nervous system disorder; Alzheimer's disease; stroke; Parkinson's disease; Huntington's disease; coagulation disorder; haemophilia; thrombosis; inflammatory disorder; Crohn's disease;
                                                                                                                                                                                                                                                                                                                  expressed sequence tag; EST; probe; chemotactic; proliferative; immunomodulatory; haematopoietic; chemokinetic; analgesic; haemostatic thrombolytic; antiinflammatory; cytostatic; antibacterial; antifungal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1003
                 20-APR-2000
                                                                                                                                                                                                                                                                                                  antiviral; antidiabetic; antiasthmatic; vulnerary; antiparkinsonian;
                                                                                                                                                                                                                                                                                                                                                                        Human; mouse; chicken; rat; secreted expressed sequence tag; sEST;
                                                                                                                                                                                                                                                                                                                                                                                                               Human secreted expressed sequence tag SEQ ID NO:1111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA44536 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                       WO200021991-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      583 aatattagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgctgcctcttctggtcttgcacctgcttctcaaattt 1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagggtaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgccgcccgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaaattcagggcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ctgctgcctcttctggtcttgcacctgcttctcaaattt 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctgg 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aactacacttgcgtggcctccaacaagctgggccacaccaatgccagcatcatgctattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aactacacttgcgtggcctccaacaagctgggccacacccaatgccagcatcatgctattt 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gaaaacagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgactatggg 1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gaattccagtggtacaaggatgacaaaagactgattgaaggaaaggaaaggggtgaaagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gaattccagtggtacaaggatgacaaaagactgattgaaggaaagaaggggtgaaagtg 942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccctcagca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccctcagca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagggtaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgcgcccgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcagggcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aatattagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ggtccaggcgcgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctgg 1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gaaaacagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgactatggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA;
                                                                                                                              depression; psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                  88
                                                                                                                                                                                                                                                                                                                                          haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
```

```
CC antiasthmatic; vulnerary; antiuloer; osteopathic; neuroprotective; CC antiasthmatic; vulnerary; antiporiatic; cerebroprotective; CC anticonvulsant; and antidepressant. The sESTs can be used for gene CC therapy and in vaccines. The sESTs are useful as probes for the CC identification and isolation of full-length cDNAs and genomic DNA complex which correspond to the SESTs. Proteins encoded by the SESTs CC molecules which correspond to the SESTs. Proteins encoded by the SESTs CC are useful in assays for determining biological activity and raising CC antibodies. They may be useful for treatment of autoimmune disorders CC (multiple sclerosis, insulin dependent diabetes), allergic conditions CC (asthma), myeloid or lymphoid cell deficiencies, wounds, burns, ulcers, CC (asthma), myeloid or lymphoid cell deficiencies, wounds, burns, ulcers, CC (Alzheimer's, Parkinson's, Huntington's disease, stroke), coagulation CC (disorders (haemophilia, thrombosis), inflammatory disorders (crohn's components), bacterial, fungal or viral infections, depression and CC psoriasis. AAA45926 to AAA45931 represent linker variants which are given
                                                                                                                                                                                                                                                                                                                                                                                                             chemotactic; proliferative; immunomodulatory; haematopoietic; chemokinetic; analgesic; haemostatic; thrombolytic; antiinflammatory; cytostatic; antibacterial; antifungal; antiviral; antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence tags (SESTs), isolated from human, mouse, chicken and rat tissue sources. The SESTs can have a range of activities depending on the tissues they were isolated from. The activities include:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-317938/27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Merberg D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jacobs K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA43426 to AAA45925 represent specifically claimed secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GEMY ) GENETICS
                                             the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                as autoimmune, infectious, and central nervous system disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Page 487-488; 803pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polynucleotides, and encoded proteins, comprising d sequence tags (SESTs), useful for treating various
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   мссоу лм,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treacy M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0104436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US24206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LaVallie ER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bowman MR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Collins-Racie LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ins, comprising secreted treating various disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Evans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ed expressed and rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     c;
```

QV

QΥ

δÃ

Q

Sequence 832 BP; 246 A; 217 C; 206 G; 163 T; 0 other;

Query Match Best Local Similarity

46.5%; 99.6%;

Length 832;

```
δõ
                                                                      δÃ
                                                                                                            밁
                                                                                                                                         QΨ
                                                                                                                                                                             밁
                                                                                                                                                                                                                γ
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                 QΨ
                                                                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 800;
                                                                                                                                                                               206
                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                      146
                                                                                                                                                                                                                                                                    121 aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttc 180
                                                                        301
                                                                                                            266
                                                                                                                                             241
   361
                                                                                                                                                                                                                                                                                                                          87
                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                                                                                                1 gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaaatct 60
                                                                                                                                                                                               acggggctggctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                                                                                                         atcaggaaagaaagaaagaaaaaaaaaccgaacctgacaaaaaagaagaagaaaaagaagaaga 120
                                                      actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct 360
                                                                                                                            ttccccaaagctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgc
                                                                                                                                                                             acggggctggctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccacc
                                                                                                                                                                                                                                                      aaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttc
                                                                                                                                                                                                                                                                                                                                                                                              gtccttcagcaaaacagtggatttaaatctccttgcacaagcttgagagcaacacaatct 86
gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                   actattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgct
                                                                                                        ttccccaaagctatggacaacgtgacggtccggcaggggggagagcgccaccctcaggtgc
                                                                                                                                                                                                                                                                                                                       atcaggaaagaaagaaag-aaaaaaaccgaacctgacaaaaaagaagaagaagaaga 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 787.8; DB 21;
Pred. No. 1.7e-188;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                 300
                                                                                                                                                                                 265
                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                         205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1;
```

۳.

```
RESULT 13
AAQ51015
  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뮋
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                  (LOHH/)
The sequence is that of the rat opioid receptor gene. The generable to hybridise with endogenous mRNA for an opioid binding post of suppress expression of an opioid receptor gene. Transgenic animals contg. the gene in reverse are useful in diagnosis and
                                                                                         Transgenic animals and novel oligo-nucleotide constructs - useful in diagnosis and treatment of addiction to narcotic analgesics
                                                                                                                                                                                                                                                                                                                                                                  Transgenic; narcotics; analgesics; expression; antisense therapy; analogue; derivative; degradation; chronic pain; cancer; morphine detection; diagnosis; additicts; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ51015 standard; cDNA; 3069
                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAY-1994
                                                                                                                                                                                                                                       10-APR-1992;
                                                                                                                                                                                                                                                               29-MAR-1993;
                                                                                                                                                                                                                                                                                         28-OCT-1993
                                                                                                                                                                                                                                                                                                                 WO9321309-A.
                                                                                                                                                                                                                                                                                                                                                                                                                      Rat opioid receptor gene.
                                                                                                                                 WPI; 1993-351719/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386
                                                                                                                                                            X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  accgtgaactatccaccatacct 828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                accgtgaactatccaccatacat 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atagcaattggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcggtt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         attgtagagatttcttcagatatctccattaatgaagggaacaatattagcctcacctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cagacagacaaccacaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gactacgagtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gactacgagtgcagtgcctccaatgacgtggccgcgcgcccgtggtacggagagtaaaggtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cagacagacaacccacaccaaagacctctagggtccacctcattgtgcaagtatctcccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcggtg
                                                                                                                                                                                                                                                                                                                                           rattus
                                                                                                                                                                                   LIPPMAN D.
LOH H H.
                                                                                                                                                                                                             LEE N M
                                                                                                                                                         Lippman D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                 25-30;
                                                                                                                                                                                                                                       92US-0866677
                                                                                                                                                                                                                                                                93WO-US02913
                                                               49pp; English.
                                                                                                                                                           Loh
                                                                                                                                                           H
                                      The gene
                                                                                                                                                                                                                                                                                                                                                                                 morphine;
                       protein
                                      is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     445
```

```
ΩV
                                         В
                                                                  Qγ
                                                                                                В
                                                                                                                        δÃ
                                                                                                                                                      g
                                                                                                                                                                               Qγ
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                    γ
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                          γQ
                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            888888%&
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Si
Matches 729;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treatment for addiction to narcotic analgesics. By admin. of antisense fragments of the gene, chronic pain, such as in terminal cancer patients can be treated without development of tolerance to analgesics such as morphine. The gene may aslo be used diagnostically to detect addicts.

See also AAQ51016-7.
                                                                                                                                                                                                                                                                  1176
                                                                                                1356
                                                                                                                                                                                                                                                                                                                                                                            1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3069
                                                                                                                                                                                                                                                                                                                    1236
                                                                                                                                                                                                                                                                                                                                                 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             149
986 ctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccaccaccaatg
                                                                                                                                                                                                                                       746
                                                                                                                                                                                                                                                                                                                                                                                                       569
                                                                                                                                                                                                                                                                                                                                                                                                                                   996
                                                                                                                                                                                                                                                                                                                                                                                                                                                             509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            caggagtgccggtgcgcagcggagatgccacctttcccaaagctatggacaacgtgacgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  agatgtaccatcccgcctactggatcgtcttctcggccaccactgccctgctcttcatcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tgtatgacgagggcccttacacctgctcggtgcagaccagaccaacccacaagacctcta 508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggttgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacgg
                                                       agaaaggggtgaaagtggaaacagacctttcctctcaaaactcatcttcttctaatgtct
                                                                                                                                                                                                                          acgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccatacattt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctgctgtccccatggctgaattccagtggttcaaggaagataccaggttagccactggcc
                                                                                                                                                   caaaagcgaagaacactggcgtttcagtaggccagaagggcatcctgagctgtgaagcct
                                                                                                                                                                   atgtcgctgcacctgatgttcggaaagtaaaaatcactgtaaactatcctccctatatct
                                                                                                                                                                                                                                                                               tggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatg
                                                                                                                                                                                                                                                                                                                                   tgaatgagataagcagtgtgaccttgttatgtctcgcaattggcagaccagaaccaacag
                                                                                                                                                                                                                                                                                                                                                                                         taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacgg
                                                                                                                                                                                                                                                                                                                                                                                                                                gggtccacctcatagtgcaagttcctccccagataatgaacatctcttcagacattactg
                                                                                                                                                                                                                                                                                                                                                                                                                                                gggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cctggctaaaccgcagcacaatcctctacgctgggaatgacaagtggtccatagaccctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tccggcagggagagagcgccaccctcaggtgtaccatagatgaccgggtcaccagagtag
                                                                                                                                                                                                                                                               tggaaatctcagacatcaaacgcgaccaatctggagagtatgagtgcagcgccttgaatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 803 A; 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31.9%;
71.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 540.8; DB 14
Pred. No. 5.4e-126;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ç;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
              1045
                                                                                                                                                                                                                                                                                                                       1175
                                                                                                                                                                                                                                                                                                                                                                              1115
                                                                                                                                                                                                                                                                                                                                                                                                                                   1055
                                         1475
                                                                    985
                                                                                                1415
                                                                                                                           925
                                                                                                                                                        1355
                                                                                                                                                                                   865
                                                                                                                                                                                                                                       805
                                                                                                                                                                                                                                                                  1235
                                                                                                                                                                                                                                                                                             745
                                                                                                                                                                                                                                                                                                                                                                                                                                                              568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    695
                                                                                                                                                                                                             1295
                                                                                                                                                                                                                                                                                                                                                  685
                                                                                                                                                                                                                                                                                                                                                                                                         628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         268
```

B

1476

1535

```
RESULT 14
AAQ51017
ID AAQ510:
                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                      Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
 Ъ
                                                 Query Match
Best Local Similarity
Matches 695; Conserv
                                                                                                                                     animals contg. the gene in reverse are useful in diagnosis and treatment for addiction to narcotic analgesics. By admin. of antisense fragments of the gene, chronic pain, such as in terminal cancer patients can be treated without development of tolerance to analgesics such as morphine. The gene may aslo be used diagnostically to detect addicts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Transgenic; narcotics; analgesics; expression; antisense therapy; analogue; derivative; degradation; chronic pain; cancer; morphine; detection; diagnosis; additicts; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1046
                                                                                                              Sequence 2179
                                                                                                                                                                                                                           The sequence is that of the rat opioid receptor gene. The gene able to hybridise with endogenous mRNA for an opioid binding proto suppress expression of an opioid receptor gene. Transgenic
                                                                                                                                                                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                       Transgenic animals and novel oligo-nucleotide constructs - useful in diagnosis and treatment of addiction to narcotic analgesics
                                                                                                                                                                                                                                                                                                                                              WPI; 1993-351719/44
                                                                                                                                                                                                                                                                                                                                                                       Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W09321309-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rat opioid receptor gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-MAY-1994 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ51017;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ51017 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1656 aaga
                                                                                                                                                                                                                                                                                                                                                                                                (LUHH/)
                                                                                                                                                                                                                                                                                                                                                                                                            (LIPP/) LEE N M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-OCT-1993
378 aggagtgccggtgcgcagcggagatgccacctttcccaaagctatggacaacgtgacggt 437
             210 aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaac@tgacggt 269
                                                                                                                                                                                                                                                                                                                                                                       X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gtga 1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgagga 1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cactggcttgtctctggctctcagggaccttctttgcccacttcttcatcaagtttttgat 1655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gggcaggctgcgtctggctgctcttctggtcttgcacctgcttctcaaattttgat 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ccagcatcaccctgtatgggcctggagcagtcattgatggtgtaaactcggcctctagag 1595
                                                                                                                                                                                                                                                                                                                                                                                               LIPPMAN :
                                                                                                                                                                                                                                                                                                                                                                      Lippman
                                                                                                                                                                                                                                                                               Page 34-7; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1659
                                                   Conservative
                                                                                                                 8만;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   92US-0866677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93WO-US02913
                                                                                                                                                                                                                                                                                                                                                                                                            U
                                                                                                                                                                                                                                                                                                                                                                       'n
                                                                                                               548 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                             30.9%;
72.2%;
                                                                                                                                                                                                                                                                                                                                                                         Pop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2179
                                                                                                               533 C;
                                                                                                                                                                                                                                                                                                                                                                       HH
                                                  0;
                                                             Score 523; DB 14;
Pred. No. 1.4e-121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                                                                                                                 494
                                                   Mismatches
                                                                                                                 <u>ن</u>
                                                                                                                 604
                                                                                                                 <del>-</del>∃
                                                   265;
                                                                                                                 0
                                                                                                                 other;
                                                                          Length
                                                   Indels
                                                                          2179;
                                                 Ψ
                                                                                                                                                                                                                                          protein
                                               Gaps
                                                                                                                                                                                                                                                         ìs
                                                 ۲.
```

AAQ51016

AAQ51016;

AAQ51016 standard;

cDNA;

2337

17-MAY-1994

(first entry)

```
Вþ
                          Qy
                                                     밁
                                                                              Qy
                                                                                                            뒪
                                                                                                                                      Qγ
                                                                                                                                                                  Db
                                                                                                                                                                                            ΩV
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                              рь
                                                                                                                                                                                                                                                                                                       SA
SA
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                           QY
                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q_{Y}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
1338
                                                                                                                                                                                                                                                                              1038
                                                       1278
                                                                                                                                                                   1158
                           1167
                                                                                 1107
                                                                                                              1218
                                                                                                                                        1047
                                                                                                                                                                                               987
                                                                                                                                                                                                                         1098
                                                                                                                                                                                                                                                   927
                                                                                                                                                                                                                                                                                                                                    978
                                                                                                                                                                                                                                                                                                                                                              807
                                                                                                                                                                                                                                                                                                                                                                                           918
                                                                                                                                                                                                                                                                                                                                                                                                                                                 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     270
                                                                                                                                                                                                                                                                                                          867
                                                                                                                                                                                                                                                                                                                                                                                                                    747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              330
aga
                                                                                                                                                                                                                                                                                                                                                   agaagccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtgaagcctc
                                                                                                                                                                                                                                                                                                                                                                                                       cgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agtgatcatcttggtcaacacgcctacccagtacagtatcatgatccagaatgtggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctggctaaaccgcagcacaatcctctacgctgggaatgacaagtggtccatagaccctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ccggcagggagagagcgccaccctcaggtgtaccatagatgaccggggtcaccagagtagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccggcagggggagagcccaccctcaggtgcactattgacaaccggggtcacccgggtggc
                           tga 1169
                                                                                                                                                                                                                                      gaaaggggtgaaagtggaaaacagacctttcctctaaaaactcatcttcttcaatgtctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatactt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gaatgagataagcagtgtgaccttggtatgtctcgcaattggcagaccagaaccaacagt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \tt ggtccucctcatagtgcaagttcctccccagataatgaacatctcttcagacattactgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      actggcttgtctctggctctcagggaccttctttgcccacttcttcatcaagttttgata
                                                                              ggcaggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattttgatg
                                                                                                           cagcatcaccctgtatgggcctggagcagtcattgatggtgtaaactcggcctctagagc
                                                                                                                           cagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggag
                                                                                                                                                                  tgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgc
                                                                                                                                                                                                                      ggatggcgtgagaattgagaacaaaggccgcatatccactttgactttcttcaatgtctc 1157
                                                                                                                                                                                                                                                                            tgctgtccccatggctgaattccagtggttcaaggaagataccaggttagccactggcct
                                                                                                                                                                                                                                                                                                       agcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaa
                                                                                                                                                                                                                                                                                                                                 aaaagcgaagaacactggcgtttcagtaggccagaagggcatcctgagctgtgaagcctc
                                                                                                                                                                                                                                                                                                                                                                                          tgtcgctgcacctgatgttcggaaagtaaaaatcactgtaaactatcctccctatatctc
                                                                                                                                                                                                                                                                                                                                                                                                                                               ggaaateteagaeateaaacgegaeeaatetggagagtatgagtgeagegeettgaatga
                                                                                  1166
                                                                                                                                                                     1217
                                                                                                                                                                                                                                                                                1097
                                                                                                              1277
                                                                                                                                                                                               1046
                                                                                                                                                                                                                                                                                                          926
                                                                                                                                                                                                                                                                                                                                     1037
                                                                                                                                                                                                                                                                                                                                                                866
                                                                                                                                                                                                                                                                                                                                                                                           977
                                                                                                                                                                                                                                                                                                                                                                                                                       806
                                                                                                                                                                                                                                                                                                                                                                                                                                                 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            497
                                                                                                                                                                                                                                                    986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 389
```

opioid receptor

gene

```
δÃ
                                                                                            B
                                                                                                                 QΥ
                                                                                                                                                                     ΔÃ
                                                                                                                                                                                                  В
                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                      Ър
                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                δõ
                                       g
                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                            Best
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is that of the rat opioid receptor gene. The gene is able to hybridise with endogenous mRNA for an opioid binding protes to suppress expression of an opioid receptor gene. Transgenic animals contg. the gene in reverse are useful in diagnosis and treatment for addiction to narcotic analyssics. By admin. of antisense fragments of the gene, chronic pain, such as in terminal cancer patients can be treated without development of tolerance to analyssics such as morphine. The gene may aslo be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Transgenic; narcotics; analgesics; expression; antisense therapy; analogue; derivative; degradation; chronic pain; cancer; morphine detection; diagnosis; additicts; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 5; Page 30-3; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Transgenic animals and novel oligo-nucleotide constructs - use in diagnosis and treatment of addiction to narcotic analgesics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lee NM, Lippman D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (/HHOT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09321309-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus rattus
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnostically to detect addicts. See also AAQ51015-7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1993-351719/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-0CT-1993
                                                                 510
                                                                                                                                                                                                    667
                                                                                                                                                                                                                                                      607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (LEEN/)
               570
                                        847
                                                                                            787
                                                                                                                     450
                                                                                                                                                727
                                                                                                                                                                         390
                                                                                                                                                                                                                             330
                                                                                                                                                                                                                                                                                  270
                                                                                                                                                                                                                                                                                                           547
                                                                                                                                                                                                                                                                                                                        210 aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 269
                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                         ggtccacctcattgtgcaagtatctcccataaattgtagagatttcttccagatatctccat
                                                                                                                                                                                                                ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
              taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                       ggtccacctcatagtgcaagttcctccccagataatgaacatctcttcagacattactgt
                                                                                           agtgatcatcttggtcaacacgcctacccagtacagtatcatgatccagaatgtggatgt
                                                                                                                                                              cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                  ctggctaaaccgcagcacaatcctctacgctgggaatgacaagtggtccatagaccctcg
                                                                                                                                                                                                                                                      ccggcagggagagagcgccaccctcaggtgtaccatagatgaccgggtcaccagagtagc
                                                                                                                                                                                                                                                                               ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc
                                                                                                                                                                                                                                                                                                          aggagtgccggtgcgcagcggagatgccacctttcccaaagctatggacaacgtgacggt
                                                                                                                                                                                                                                                                                                                                                               695;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LEE N M.
LIPPMAN D.
LOH H H.
                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92US-0866677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93WO-US02913
                                                                                                                                                                                                                                                                                                                                                                         30.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Loh HH;
                                                                                                                                                                                                                                                                                                                                                                                                                                A; 578 C; 520
                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                          Score 523; DB 14;
Pred. No. 1.4e-121;
                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                 ç;
658 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                 other;
                                                                                                                                                                                                                                                                                                                                                                                        Length 2337;
                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Transgenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    morphine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful
                                                                                                                                                                                                                                                                                                                                                               ų.
                                                                                                                                                                                                                                                                                                                                                               Gaps
               629
                                                                                                                                              786
                                                                                                                                                                         449
                                                                                                                                                                                                                                                                                 329
                                                                                                                                                                                                                                                                                                           606
                                                                                           846
                                                                                                                     509
                                                                                                                                                                                                  726
                                                                                                                                                                                                                           389
                                                                                                                                                                                                                                                      666
                                                                                                                                                                                                                                                                                                                                                              ۲.
```

80 δÃ 맑 Qy B δÃ g Qy 뭣 γQ Вþ Ωy В 밁 VQ. 맖 Qy В 밁 1147 1167 1507 1447 1207 1087 1107 1327 1027 1267 987 927 807 907 | tacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatactt gaatgagataagcagtgtgaccttgttatgtctcgcaattggcagaccagaaccaacagt 966 aaaagcgaagaacactggcgtttcagtaggccagaagggcatcctgagctgtgaagcctc aga ggcaggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattttgatg 1166 cagcatcatgctatttggtccaggcgcgtcagcgaggtgagcaacggcacgtcgaggag 1106 tgaacatgactatgggaactacacttgcgtggcctccaacaagctggggccacaccaatgc 1046 gaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctc tgctgtccccatggctgaattccagtggttcaaggaagataccaggttagccactggcct 1266 agcagtcccctcagcagaattcccagtggtacaaggatgacaaaagactgattgaaggaaa agaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctc cgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttc ggaaatctcagacatcaaacgcgaccaatctggagagtatgagtgcagcgccttgaatga ggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatga tga actggcttgtctctggctctcagggaccttctttgcccacttcttcatcaagttttgata 1506 cagcatcaccctgtatgggcctggagcagtcattgatggtgtaaactcggcctctagagc ggatggcgtgagaattgagaacaaaggccgcatatccactttgactttcttcaatgtctc tgtcgctgcacctgatgttcggaaagtaaaaatcactgtaaactatcctccctatatctc 1169 1206 1146 1086 1326 986 866 806 926

Search completed: July 11, Job time: 8958 sec 2002, 23:01:30

```
Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                     Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
                                                                                                                                                                                          No.
 110
110
112
113
114
115
                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
        462
457.4
455
450
447.6
423.2
411.4
                                                                                 531.4
521
507
495.4
494.8
463
                                                                                                                                                                                          Score
                                                                                                                                                                                          Match Length
IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         July 11, 2002, 18:35:21; Search time 2986.73 Seconds (without alignments) 4663.581 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 atgaaaaccatccagccaaa....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-700-397-1
1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13736207 seqs, 6748477542 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                              gb_est1:*
                                                                                                                                                                                                                                                                                                                                                                       em_htc:*
                                                                                                                                                                                                                                                                                                                                                                                                         em_estov:*
                                                                                                                                                                                                                                                                                                                                                                                                                  em_estmu:*
                                                                                                                                                                                                                                                                                                                                                                                                                              em_estin:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                 em_estba:*
                                                                                                                                                                                                                                                                                                                                         gb_est2:*
gb_htc:*
                                                                                                                                                                                                                                                                                                                                                                                     em_estro:*
                                                                                                                                                                                                                                                                                                                                                                                               em_estpl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                        em_esthum:*
                                                                                                                                                                                                                                                                                      em_gss_pln:*
em_gss_vrt:*
                                                                                                                                                                                                                                                                                                                    gb_gss:*
em_gss_hum:*
                                                                                                                                                                                                                                                                                                          em_gss_inv:*
1039
865
732
732
1015
784
788
661
979
979
849
975
553
                                                                                                                                                                                           DВ
                                                                                             10
10
 9
10
10
10
10
10
10
                                                                                                     D BI551784
AL533026
BI549918
D BI548566
                                                   BE014142
) BG261691
BG706987
BI598759
BB644996
                                                                                             AU080629
                                                                                                                                                                                            IJ
                            BI755360
BE864555
                                                                        BM009450
BM423716
                                                                                                                                                BI666583
BE263639
                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ...tgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27472414
       BM423716 AGENCOURT
BE014142 125737 MA
BG261691 602373361
B1755360 603024964
BE864555 UT-M-BH1-
BG706987 602672194
B1598759 603245538
                                                                                            BE263639 601192064
BI551784 603197479
AL533026 AL533026
BI549918 603194765
BI548566 603189502
AU080629 AU080629
                                                                                                                                                                                          Description
                                                                                                                                                         BE798585 601581610
BI666583 603291469
                                                                                   BM009450
                                                                                  603629962
```

	a		
39 440 442 443	335432	25 25 26 27 28 29 30	18 19 20 21 21 22 23
238 235.6 235.4 231.8 220 210 210 209 208.4	288.8 286.2 284.2 261	344 336 328.8 325 323.4 310.2 295 291.6	404.2 396.8 388.8 371 356.8 347.2
23.1 22.8 22.8 22.5 21.3 20.3 20.3	28.1 28.0 28.0 27.7 27.7 27.5 27.5	33.3 32.6 31.9 31.5 31.3 30.1 28.6	39.2 38.4 37.7 35.9 34.6
282 788 492 277 444 229 257 1148	290 567 497 579 528 456	806 522 688 329 605 764	557 533 754 705 683
10	10 10 9		10 10 10 9
R/5391 B1767217 AW967001 B1011319 AA662970 AA450172 AA437110 BM466102	F05894 BF078551 BB854833 BB644523 BB856778 A1369684	B1553032 BB646531 F06205 B1548049 B1548049 B1752729 R18841	BM256660 BI341675 BI550038 BI550038 BG704152 BB640070 BE015245
R75391 MDB0558R MOB0757217 603057906 AW967001 EST379075 B1011319 QV2-EN009 AA682970 ae89a04.s AA450172 zx42d09.r AW327110 20640 MAR BM466102 AGENCOURT	F05894 HSCOPH101 n BF078551 228917 MA BB054833 BB654833 BB644523 BB644523 BB656778 BB856778 AI369684 qy71g03.x	AU051132 B1553032 603193672 BB646531 BB646531 F06205 HSC10F041 n B1548049 603196558 BB611718 BB611718 BBF2729 603028343 R18841 yg22g06.rl	ผดเป

ALIGNMENTS

REFERENCE AUTHORS SOURCE ORGANISM RESULT BE798585 FEATURES COMMENT KEYWORDS VERSION ACCESSION DEFINITION Locus TITLE JOURNAL source Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1039)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999) Email: cgapbs-r@mail.nih.gov Tissue Procurement: DCTD/DTP 601581610F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935955 High quality sequence stop: 849.
Location/Qualifiers found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov
Plate: LICM779 row: d column: 04 Contact: Robert Strausberg, Ph.D. Homo sapiens BE798585.1 GI:10219783 mRNA sequence. ոսman. cDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can /tissue_type="small cell carcinoma"
/cell_line="MGC3" /clone="IMAGE:3935955" /clone_lib="NIH_MGC_7" 1. .1039 /organism="Homo sapiens" /db_xref="taxon:9606" 1039 bp linear EST 20-SEP-2000

δÃ

Collection

(NHGRI),

Shiraki

эď

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                 RESULT
BI666583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                              SOURCE
ORGANISM
        REFERENCE
                                                                                                  KEYWORDS
                                                                                                                       VERSION
                                                                                                                                           ACCESSION
                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                   Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          165 caggtgcactattgacaaccgggtcacccgggttggcctggctaaaccgcagcaccatcct 224
                                                                                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  285
                                                                                                                                                                                                                                                                                                725
                                                                                                                                                                                                                                                                                                                                                                                                             765
                                                                                                                                                                                                                                                                                                                                                                                                                                                   605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aacgcagtacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tcccaaaattgtagagatttcttcagatatctccattaatgaagggaacaatattagcct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCGGTGCAGACAGACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ctcggtgcagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatc
                                                                                                                                                                                                                                                                                              ACCTTTTTCCTC
                                                                                                                                                                                                                                                                                                                                    acctttcctctc 833
                                                                                                                                                                                                                                                                                                                                                                         GTACAAGGATGACAAAAGACTGATTGAAGGAACAGACAGGGGGTGAACAGTTGGAAAAACAG 724
                                                                                                                                                                                                                                                                                                                                                                                               gtacaaggatgacaaaagactgattgaaggaa---agaaaggggtgaaagtggaaaacag 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gggacaaaaggggacactgcagtgtgaagcctcagcagtccccctcagcagaattccagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aaaggtcaccgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgt .704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCAGGGGACTACGAGTGCCAGTGCCTCCAATGACGTGGCCGCGCGCCCCGTGGTACGGAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gtcaggggactacgagtgcagtgcctccaatgacgtggccgcgcgccgtggtacggagagt 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCA 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    agcggttggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACCTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cacctgcatagcaactggtagaccagagcctacggttacttggagacacatctctcccaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCCAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACGCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctatgctgggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGTGCACTATTGACAACCGGGTCGCCCGGGTGGCCTGGCTAAACCGCAGCACCATCCT
    Eukaryota; Metazoa;
Mammalia; Eutheria;
1 (bases 1 to 865)
                                                                                                                                       mRNA sequence.
BI666583
                                                                                                                                                                                               BI666583
                                                              Homo sapiens
                                                                                                                     BI666583.1 GI:15580816
                                                                                                                                                                           603291469F1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:5310833 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   274 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNs Synthesis kit (Stratagene) and Superscript IRT (Life Technologies)."

271 c 286 g 207 t 1 others
                                                                                                                                                                                                                                                                                                736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61.6%;
97.6%;
                        Chordata; Craniata; Vertebrata; Primates; Catarrhini; Hominidae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 635.2; DB 10
Pred. No. 5.9e-161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                 865 bp
                                                                                                                                                                                                 mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10;
                        Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1039
                                            Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          404
                                                                                                                                                                                                                                                                                                                                                                                                                                                   664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
  δÃ
                                        Дb
                                                                      Qy
                                                                                                                   밁
                                                                                                                                                     Qy
                                                                                                                                                                                             В
                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                          Qγ
                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
    480
                                          603
                                                                                                                     543
                                                                                                                                                                                               483
                                                                                                                                                                                                                                                                          423
                                                                                                                                                                                                                                                                                                                                                                                                                             303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                            421
                                                                                                                                                         361
                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg
                                                                                                                 tggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgt
                                                              atttcttcagatatctccattaatgaagggaac-aatattagcctcacctgcatagcaac
                                                                                                                                                                                           | aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                                                                                                         aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                             GCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAGGTGCACTATTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAATCTTCACGGGGCTG
                                                                                                                                                                                                                                                                        AAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAACGCAGTACAGCATC
                                                                                                                                                                                                                                                                                                                                                   AACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCTGGGAATGAC
                                        ATTTCTTCAGATATCTCCATTAATGAAGGGAACAAATATTAGCCTCACCTGCATAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             al Similarity
552; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Ma
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         High quality sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLAM11787 row: j column: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Toshiyuki and Piero Carninci (RIKEN) cDNA Library Arrayed by: The I.M.A.G.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tissue Procurement: Miklos Palkovits, cDNA Library Preparation: Michael J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library.' a 230 c 209 g 176 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note-"Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site_1: BamHI; Site_2: Sall-XshoI (gtcgag pB): Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTTTTVN-3', size-selected for average insert size 2.3 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5310833"
/clone_lib="NIH_MGC_96"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="hypothalamus"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 541; DB 10;
Pred. No. 1.7e-135;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         M.D., Ph.D.
Brownstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Consortium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 865;
```

سر • •

Gaps

۳.

242 60

422 240

300

180 302

362

602 420 542 360 482

662

Library."

Qγ Вb 200 밁 Qy B Qy Вb ΩÃ

Qy

D) Q δÃ Дb Qγ Qy

γQ

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멇
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BE263639
                             Qy
                                                                      Дb
                                                                                                     QΥ
                                                                                                                                            Db
                                                                                                                                                                             Qy
                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                     ΩУ
                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
241
                                 511
                                                                                                           451
                                                                                                                                                                                   391
                                                                                                                                                                                                                                                         331
                                                                        181
                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                 271 ctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacgag
                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                              1 CTGAGCAACACCCAAACGCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGTGAAGACGAA 735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gagtgaagacgaa 552
||||||||||||||
                                                                                                                                                                                                                                           ggcccttacacctgctcggtgcagacagacaaccacccaaagacctctagggtccacctc 390
                     AACAATATTAGCCTCACCTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGA
                                                                                         aacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttggaga
                                                                                                                                                ATTGTGCAAGTATCTCCCAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGG
                                                                                                                                                                 attgtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaaggg 450
                                                                                                                                                                                                                      GGCCCTTACACCTGCTCGGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 545)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BE263639 545 bp mRNA linear EST 13-UU-601192064F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536127 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Plate: LLCM217 row: p column: High quality sequence stop: 545.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BE263639.1 GI:9137183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: cgapbs_r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    numan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       162
                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /lab_nost="DH10B (phage-resistant)"
/lab_nost="DH10B (phage-resistant)"
/note="Organ: lung; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; CNDA made by Oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
a 134 c 144 g 105 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone="IMAGE:3536127"
/clone_lib="NIH_MGC_7"
/tissue_type="small cell carcinoma"
/cell_line="MGC3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                           51.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                        Score 531.4; DB 10;
Pred. No. 5.3e-133;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                               Length 545;
                                                                                                                                                                                                                                                                                                                                                                            <u>;</u>
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                         240
                                                                                                             510
                                                                                                                                                  180
                                                                                                                                                                                                                           120
   300
                                                                                                                                                                                                                                                                                                                                                                            ۳.
```

```
RESULT
BI551784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ζŅ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ORIGIN
                BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361 GTGGTACGGAGAGTAAAGGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541 AGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccctca 750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGAATTCCAGTGGTACAAGGATGACAAAAGACTGATTGAAGGAAACGAAAGGGGTGAA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gcagaattccagtggtacaaaggatgacaaaagactgattgaaggaaa-gaaaggggtgaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagggt 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGGTGTCCCCGTGGGACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     agtgg 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
BI551784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI551784 732 bp n
603197479F1 NIH_MGC_95 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                               Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Miklos Palkovits,
cDNA Library Preparation: Michael J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates; 1 (bases 1 to 732)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BI551784.1 GI:15439096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Robert Strausberg, Ph.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                            High quality sequence stop: 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  545
                  218
                                                                                                                                                                                                                                                                                                                                                                                                   LLAM11699
                  a
            /note="Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site_1: BanHI; Site_2: SalI-XNDI (gtcgag); Oligo-dT primed using primer 5'.7TTTTTTTTTTTTTTTTTTTVN-3', size-selected for average insert size 2.5 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library." a 191 c 172 g 150 t 1 others
                                                                                                                                                                                                               /tissue_type="hippocampus"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                           /db_xref="taxon:9606"
/clone="IMAGE:5277115"
                                                                                                                                                                                                                                                        /clone_lib="NIH_MGC_95"
                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                   row: m column: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata;
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            M.D., Ph.D.
Brownstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ear EST 05-SEP-2001
IMAGE:5277115 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
```

Query Match
Best Local Similarity
Matches 543; Conserv

Conservative

0;

Score 521; DB 10; Pred. No. 4.1e-130; 0; Mismatches 1;

Length

Indels

? Gaps

2

50.5%;

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
AL533026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                      FEATURES
                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctggqaatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ggtagaccagagcctacggttacttgg-agacacatctctcccaaaagcggttggctttgt 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGTGA 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gagtga 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCACCTGCATAGCAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AANCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCCCAAAATTGTAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aaccacecaaagacetctagggtccacetcattgtgcaagtatetccccaaaattgtagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagt cagcatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCTGGGAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAGGTGCACTATTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGCTCTGTGTCTCCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAATCTTCACGGGGCTG
                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1015)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNa libraries and normalization Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                   prime, mRNA sequence.
AL533026
AL533026.1 GI:12796519
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                AL533026 LTI_FL015_Brn1
                                                                                                                                                                                   Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
                                                                                                                                                                                                                Contact: Genoscope
                                                                                                                                                                     Email:
                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                   segref@genoscope.cns.fr, Web : www.genoscope.cns
/tissue_type="Adult brain"
/note="Vector: pCMVSPORT 6; Site_1: NotI; Ist strand cDNA
was primed with a NotI-oligo(dT) primer. Five prime end
enriched, double-stranded cDNA was digested with Not I and
                                                                       /db_xref="taxon:9606"
/clone="CSODN005YD20"
/clone_lib="LTI_FL015_Brn1"
                                                            /sex="male"
                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                1015
Homo
                                                                                                                                                                                                                                                                                                                                                                                                                bp mR
                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                mRNA
ns cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                 clone
                                                                                                                                                                                                                                                                                                                                                                                                                 linear EST 13-FEB-2001
Lone CS0DN005YD20 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 667
```

BI549918 DEFINITION

BI549918 784 bp mRNA linear EST U5-54 603194765F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:5274161

EST 05-SEP-2001

mRNA sequence

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                          ŽQ
                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
밁
                                                            밁
                                                                                       Ωy
                                                                                                                         밁
                                                                                                                                                     Qy
                                                                                                                                                                                    DЪ
                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 635; Conserv
             1000 cctcttctggtcttgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             458 ttagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacacatct 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          398 aagtatctoccaaaattgtagagatttcttcagatatctccattaatgaagggaacaata 457
810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              150
                                                                                          940
                                                                                                                                                                                                                                                                                                                 510
                                                                                                                                                                                                                                                                                                                                                                              450
                                                                                                                                                                                                                                                                                                                                                                                                                                           390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 210
                                                            750
                                                                                                                         690
                                                                                                                                                        880
                                                                                                                                                                                      630
                                                                                                                                                                                                                     820
                                                                                                                                                                                                                                                    570
                                                                                                                                                                                                                                                                                    782
                                                                                                                                                                                                                                                                                                                                               782
                                                                                                                                                                                                                                                                                                                                                                                                            758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           90
                                                                                                                                                                                      AGACCTTTCCTCAAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTAC
                                                                                                                                                                                                                                                                                                                                                                                                          tccagtggtacaaggatgacaaaa-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                          tococgtgggacaaaaggggacactgcagtgtgaagcotcagcagtcccotcagcagaat 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgccgccgccgtggtac 637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcagggcatcaccc 577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGTATCTCCCAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATA 149
                                                            GGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGGCTG
                                                                                                                                        acttgcgtggcctccaacaagctgggccacaccaatgccagcatcatgctatttggtcca 939
                                                                                                                                                                                                     agacctttcctctaaaactcatcttcttcaatgtctctgaacatgactatgggaactac
                                                                                                                                                                                                                                                 GACTTGCTCGCAGAATCCTCCCGACTGATTGAAGGAAAGAAGGGGGTGAAAGTGGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCCCGTGGGACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAAT 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAGCAGTCAGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCCAAAGCGGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCC 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAGCCTCACCTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCT 209
                                                                           ggcgccgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctggctgctg
                                                                                                                       ACTTGCGTGGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCA
                                                                                                                                                                                                                                                                                                                TCCAGTGGTACAAGGATGACAAAAGAGCTGAAATCTCATTCACAGTTTGGTTATGATGGG 509
CCTCTTCTGGTCTTGCACCTGCTTCTCAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cloned into the Not I and Eco RV sites of the pCMVSPORT (vector. Library was constructed by Life Technologies. Contact: Feng Liang Life Technologies, a division of Invitrogen 9800 Medical Center Drive Rockville, Maryland 20850, USA Fax: (1) 301 610 8371 Email: fliang@lifetech.com URL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     http://fulllength.invitrogen.com"
a 249 c 251 g 219 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       49.1%;
84.3%;
                                                                                                                                                                                                                                                                   -gactgattgaaggaaagaaggggtgaaagtggaaaac 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  251 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     507; DB 9;
No. 3e-126;
842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels 118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        329
                                                                                             999
                                                                                                                                                                                         689
                                                                                                                                                                                                                        879
                                                                                                                                                                                                                                                      629
                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                           749
```

ACCESSION

```
Qy
                                                                                                                                                                                                                                                                                                                                                           рь
                                                                                                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                     Дb
                                                                       Qy
                                                                                                                   Βb
                                                                                                                                                     Qy
                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                             253
                                        493
                                                                                                                   433
                                                                                                                                                                                                 373
                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                               313
                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                           193 ATGAAAACCATCCAGCCAAAATGCACAATTCTATCTCTTGGGCAATCTTCACGGGGCTG
361 aaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaaattgtagag 420
                                                                           301
                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 atgaaaaccatccagccaaaaatgcacaattctatctctttgggcaatcttcacggggctg 60
                                                                                                                                         aagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgccagtacagcatc 300
                                                                                                                                                                                                                         aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac 240
                                                                                                                                                                                                                                                                                                                                                             gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                     AACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCTGGGAATGAC
                                                                                                                                                                                                                                                                                                                   gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                                                                                   AAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAACGCAGTACAGCATC
                                                                                                                                                                                                                                                                               GCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTÇAGGTGCACTATTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI549918
BI549918.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Toshiyuki and Piero Carninci (RIKEN) cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mammalla; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 784)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          High quality sequence stop: 726.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Plate: LLAM11692 row: b column: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               234 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhoI (gtcg pBluescript KS+); Site_1: FamHI; Site_2: SalI-XhoI (gtcg pBluescript Graptimed using primer 5'-TTTTTTTTTTTTTTTVN-3' size-selected for average insert size 2.5 kb and normalized to ROT 5. This is a primary library enriched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). It constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Liable 11c 184 g 155 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue_type="hippocampus"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="IMAGE:5274161"
/clone_lib="NIH_MGC_95"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GI:15437230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48.0%;
98.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 495.4; DB 10;
Pred. No. 3.6e 123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    784;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                    432
                                                                                                                                                                                                                                                                                    372
                                                                                                                                                                                                                                                                                                                                                                  312
                                                                                                                                                                                                                                                                                                                                                                                                                                                252
                                            552
                                                                                                                        492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      əď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (gtcgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \frac{3}{2}
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                   γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BI548566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                           ORIGIN
                                                                                                                                                                                               BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         732 CGCGA 736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
Local Similarity
nes 518; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atttottoagatatotooattaatgaagggaacaatattagootoa-cotgoatagoaac 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tgtga 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGTAGACCAGAGCCTACGGTTACTTGGAGACACCATCTCCCCCCAAAAGCCGGTTGGCTT 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tggtagaccagagcctacggttacttggagacac---atctctcccaaagcggttggctt 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCACCCTGCATAGCAAC 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki Toshiyuki and Piero Carninci (RIKEN) CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 580)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BI548566 580 bp mRNA linear EST VITOR 603189502F1 NIH_MGC_95 Homo sapiens CDNA clone IMAGE:5260753 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tissue Procurement: Miklos Palkovits, M.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BI548566.1 GI:15435878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    High quality sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          http://image.llnl.gov
Plate: LLAM11657 row
                                                                                                                                                                                             172
                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cgapbs-remail.nih.gov
                                                                                                                                                                                                                                                                 /note="Organ: brain; Vector: pBluescriptR (modified pBluescript K9+); Site_1: BamHI; Site_2: Sall XhoI (gtcgag pBluescript K9+); Site_1: BamHI; Site_2: FITTTTTTTTTTTTTTVN-3', size-selected for average insert size 2.5 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the
                                                                                                                                                                                               Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIME/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library."

160 c 140 g 108 t
                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:9606"
/clone="IMAGE:5260753"
                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="hippocampus"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="NIH_MGC_95"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .580
                                                                                             47.9%;
99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          row: d column:
                                                                         Score 494.8; DB iv,
Pred. No. 4.5e-123;
""""" tches 2;
                                                                                                                                                                                           140 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ph.D
                                                                                                                 Length
                                                                                                                     580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 05-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                               2
                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               611
                                                                                 2
```

Вþ

δÃ Ър 20

```
RESULT
AU080629
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맔
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ထ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTATGCTGGGAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              caagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTATGGACAAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAGGTGCACTATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gctatggac-aacgtgacggtccggcagggggagagcgccaccctcaggtgcactattga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tggtagaccagagcctacggttacttggagacacatctctcc 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                caaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCACCTGCATAGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gatttottcagatatotccattaatgaagggaacaatattagcctcacctgcatagcaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCCCCCAAAA-TGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAACGCAGTACAGCAT
                                                                                                                                                                                                                                                                 Contact: Katsuyuki Hashimoto
Division of Genetic Resources
National Institute of Infectious Diseases
23-1, Toyama 1-chome, Shinjuku-ku, Tokyo
                                                                                                                                                                                                                                                                                                                                  Hasnimoto,K., Kusuda,J., Tanuma,R., 1
Suzuki,Y., Sasaki,M. and Sugano,S.
Isolation of full-length cDNA clones
library made by oligo-capping method
Unpublished (1000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AU080629 Sugano mo
5', mRNA sequence.
AU080629
                                                                                                                                                                                                                                                                                                                            Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia; Eutheria;
1 (bases 1 to 768)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AU080629.1 GI:6085383
EST.
                                                                                                                                                                                                                                       Email: khashi@nih.go.jp
URL: http://www.nih.go.jp/yoken/genbank/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   768 bp mRNA linear EST 12-JUL-2000 Sugano mouse brain mncb Mus musculus cDNA clone MNCb-5883
/strain="C57BL"
/db_xref="taxon:10000"
/clone="MNCb-5883"
/clone_lib="Sugano mouse brain mncb"
                                                                                      /dev_stage="adult"
/lab_host="TOP10"
                                                                                                                   /sex="female"
                                                                                                                                                                                            /organism="Mus musculus"
                                                                                                                                                                                                                           ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                    Chordata; Craniata; Vertebrata; Euteleostomi; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                      Tokyo 162-8640,
                                                                                                                                                                                                                                                                                                                                                                                        Ito, A.,
                                                                                                                                                                                                                                                                                                                                                             from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  580
                                                                                                                                                                                                                                                                                                                                                             മ
                                                                                                                                                                                                                                                                                                                                                              mouse brain cDNA
                                                                                                                                                                                                                                                                                                                                                                                          Hirata, M., Toyoda, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           538
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      γ
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE
                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                         닭
                                                                                                                                                                                                                                                                 Qy
     Qy
                                밁
                                                       Qy
                                                                                   В
                                                                                                         Ωy
                                                                                                                                     Вb
                                                                                                                                                            δõ
                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 498;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNT
                                                                                   644
                                                                                                                                     584
                                                                                                                                                                                       524
                                                                                                                                                                                                               301
                                                                                                                                                                                                                                          464
                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                               344
                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                   224
        541
                                704
                                                         481
                                                                                                           421
                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 atgaaaaccatccagccaaaaatgcacaattctatctcttgggcaatcttcacggggctg
                                                                                  atttetteagatateteeattaatgaagggaacaatattageeteacetgeatageact
                                                                                                                                                                                                                                                                                                        aaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgac
                                                                                                                                                                                                                                                                                                                                                                                                             gctgctctgtgtctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaa 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                  agtga
                                GGTAGACCGGAGCCTACAGTAACCTGGANACATATTTNT-CCAAGGCCGTTGGCTTTGNG
                                                                                                                                    ACCACCTAAGACCTCCAGGGTCCACCTCATTGTACAAGTATCTCCCCAAAATTGNAGAG
                                                                                                                                                 aaccacccaaagacctctagggtccacctcattgtgcaagtatctccccaaaattgtagag
                                                                                                                                                                                      AAGTGGTGCCTAGATCCTCGTGTGGTCCTCCTGAGTAACACCCCAGACCCAGTACAGCATT
                                                                                                                                                                                                                                                      aagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgcagtacagcatc
                                                                                                                                                                                                                                                                                        AACCGAGTCACCCGGGTGGCCTGNCTAAACCGCAGTACCATCCTCTATGCTGGAAATGAC
                                                                                                                                                                                                                                                                                                                                              GCTATGGACAACGTGACGGTCAGGCAGGGGGGAGAGCGCCACCCTCAGGTGCACAATTGAC
                                                                                                                                                                                                                                                                                                                                                             gctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattgac 180
                                                                                                                                                                                                                                                                                                                                                                                                 GCGGCTCTGTGCCTTTCCAAGGAGTGCCGGTGCGTAGCGGAGATGCCACCTTTCCCAAA
                                                ggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                232
        545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the cDNA insert. Size selection was performed to fragments <1.5 kb. Library was constructed by Suc al. (University of Tokyo, Institute of Medical Sc: Custom primer used for sequencing: 5' end primer [CTTCTGCTCTAAAAGCTGCG], 3' end primer [CGACCTGCAGCTGCAGCACCTGCAGCACCTGCAGCTCGAGCACCA]"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 463; DB 9;
Pred. No. 2.1e-114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               183 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Size selection was performed to exclude b. Library was constructed by Sugano et
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  157 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 768;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ļ.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Science).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                     343
                                                                                                                                                                                                                                                                                                                                                                                                                                                      283
                                                                                                                                                                                                                                                                                                463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                             523
                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                   403
                                                                                       703
                                                                                                                 48C
                                                                                                                                         643
                                                                                                                                                                   420
                                                                                                                                                                                           583
                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                      300
                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۲.
```

RESULT BM009450 LOCUS REFERENCE AUTHORS TITLE VERSION KEYWORDS COMMENT SOURCE DEFINITION ACCESSION JOURNAL ORGANISM BM009450 BM009450.1 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 661) 603629962F1 NIH_MGC_41 Homo sapiens cDNA clone IMAGE:5443743 Contact: Robert Strausberg, Ph.D Email: cgapbs-r@mail.nih.gov Unpublished (1999) NIH-MGC http://mgc.nci.nih.gov/ National Institutes of Health, Homo sapiens EST mRNA sequence. BM009450 GI:16523804 Mammalian mRNA Gene Collection (MGC) Hominidae; linear Euteleostomi; EST 30-OCT-2001 Homo

밁

763

AGTGA

767

```
QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                    ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                     80
                                                                                                                                                             B
                                                                                                                                                                                              Q
                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                            δÃ
                 BM423716
                                  RESULT
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 505;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               588
                                                                                        481
                                                                                                                                                               421
                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                           888
                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                  828
                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                         768
                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aggggactacgagtgcagtgcctccaatgacgtggccgcggtggtacggagagtaaa 647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggttggctttgtgagtgaagacgaatacttggaaattcagggcatcacccgggagcagtc 587
                                                                                                                                                                                                                                                                                                                                 cctctcaaaactcatcttcttcaatgtctctgaacatgactatgggaactacacttgcgt 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acaaaaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggta 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 60
                                                                                                             gagggcaggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                               CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT
                                                                                                                                                                                                                                                                                                                                                                                     CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                          ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ggtcaccgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtggg
                                                                                                                                                                                                                                      GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGAAGTGAAAACTAC
                                                                                                                                                                                                                                                                     ggcctccaacaagctgggccacaccaatgccagcatcatgctattt------
                                                                                        GAGGGCAGGCTGCGTCTGCCTGCTCTTCTGGTCTTGCACCTGCTTCTCAAATTT
                                                                                                                                                               AGCCCTGACCCCTTGGAAAGGTCCAGGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rissue Procurement: DCTD/DTP
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    quality sequence stop: 659.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LLCM1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZaP-cDMA Synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH MCC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="Organ: skin; Vector: pOTB7; Site_1: xhoI; EcoRI; cDNA made by oligo-dT priming. Directional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="IMAGE:5443743"
/clone=lib="NHH_MGC_41"
/tlssue_type="amelanotic melanoma, cell line"
/lab_bost="DH10B (phage-resistant)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44.8%;
93.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          row: 1 column: 16
                                                                                                                                                                                                    ggtccaggcgccgtcagcgaggtgagcaacggcacgtcgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 462; DB 10;
Pred. No. 3.6e-114;
 953
đđ
 mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 661;
 linear
 EST
 29-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          707
                                                                                                                                                                                                                                                                                                                                                                                                                           827
                                                                                                                                                                 480
                                                                                                                                                                                                      974
                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                             933
                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                         300
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                  Qy
                                                                               밁
                                                                                                                 Qy
                                                                                                                                                            В
                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                             Дb
Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                      828
                                                                                                                                                              206
                                                                                                                                                                                                      708
                                                                                                                                                                                                                                                                       648 ggtcaccgtgaactatccaccatacatttcagaagccaagggtacaggtgtccccgtggg
                                                                                                                                                                                                                                                                                                                                                                     588
                                                                                                                                                                                                                                                                                                                                                                                                                                 528 ggttggctttgtgagtgaagacgaatacttggaaaattcaggggcatcacccgggagcagtc 587
326 CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT
                                                                                                                       768
                                                                                                                                                                                                                                               146 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG
                                                                               266 CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT
                                                                                                                                                                                                                                                                                                                              86
                                                                                                                                                                                                                                                                                                                                                                                                             26
                                                                                                                                                                                                                                                                                                                                                                aggggactacgagtgcagtgcctccaatgacgtggccgcgcgccgtggtacggagagtaaa
                                                                                                                                                                                                                                                                                                                                                                                                             GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC
                         cototoaaaactoatottottoaatgtototgaacatgactatgggaactacacottgogt 887
                                                                                                    caaggatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaacagaccttt
                                                                                                                                                                                   acaaaaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtggta
                                                                                                                                                                                                                                                                                                                            AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA
                                                                                                                                                              ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               505;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryola; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 953)
NIH-MGC http://mgc.nci.nih.gov/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGENCOURT_6398987 NIH_MGC_41 Homo sapiens cDNA clone IMAGE:55169295', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC Clone distribution information can i
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            High quality sequence start: 10
High quality sequence stop: 571.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BM423716.1 GI:18391928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plate: LLCM2018 row: f column: 02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   numan.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Organ: skin; Vector: pOTBT; Site_1: XhoI; Site_2: ECORI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCAGGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Superscript II RT (Life Technologies). Note: this is NIH_MGC Library."

a 211 c 256 g 201 t 7 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone="IMAGE:5516929"
/clone_lib="NIH_MGC_41"
/tissue_type="amelanotic melanoma, cell line"
/lab_host="DH10B (phage-resistant)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44.8%;
93.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 462;
Pred. No. 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ph.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.4e-114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 953;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo.
                                                                                                                         827
                                                                                                                                                                  265
                                                                                                                                                                                                           767
                                                                                                                                                                                                                                                                                                                                  145
                                                                                                                                                                                                                                                                                                                                                                         647
                                                                                                                                                                                                                                                                                                                                                                                                                  85
                                                                                                                                                                                                                                                                                          707
  385
                                                                                     325
                                                                                                                                                                                                                                                   205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1;
```

```
RESULT 1
BE014142
                                                                                        QΥ
                                                                                                                              ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
               γ
                                                       DЪ
                                                                                                                                                               γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Locus
                                                                                                                                                                                                                                                                                                                     BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                386
                                                                                          230
                 290 agtacagcatcgagatccagaacgtggatgtgtatgacgagggcccttacacctgctcgg 349
                                                                                                                                                                   170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11
                                                       62
                                                                                                                                                                                                                          Local Similarity
                                                                                                                              N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ggcctccaacaagctgggccacaccaatgccagcatcatgctattt-------933
                                                                          ctgggaatgacaagtggtgcctggatcctcgcgtggtccttctgagcaacaccccaaacgc 289
                                                                                                                                                   gcactattgacaaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatg 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gagggcaggctgcgtctggctgcctcttctggtctttgcacctgcttctcaaattt 1032
                                                       CGGGGAATGACAAGTGGTGCCTGGACCCCCGCGTGGTCCTGCTTAGCAACACCCAGACCC 121
                                                                                                                              GCACGATCGACAACCGGGTCACCCGGGTGGCCTGGCTGAACCGAAGCACCATCCTCTATG 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGGGCAGGCTGCGTCTGCTGCTCTTCTGGTCTTGCACCTGCTTCTCAAATTT 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCCTGACCCCTTGGAAAGGTCCAGGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAG 505
                                                                                                                                                                                                        482;
pig.
Sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BE014142.1 GI:8275136 EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BE014142 524 bp mRNA linear 125737 MARC 1PIG Sus scrofa cDNA 5', mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BACKWARD: GTTTTCCCAGTCACGACG
Plate: 53 row: G column: 8
Seq primer: ATTTAGGTGACACTATAG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Single pass sequencing. Bases called and alt_trimmed with phred v0.980904.e. Vector identified by cross_match with the -minscore 18 \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 402 762 4366
Fax: 402 762 4390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USDA, ARS, US Meat Animal Research Center PO Box 166, Clay Center, NE 68933-0166, U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and Keele, J.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fahrenkrug,S.C., Freking,B.A., Rohrer,G.A., Smith,T.P.L.,
Stone,R.T., Heaton,M.P., Grosse,W.M., Bennett,G.A., Laegr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; 1 (bases 1 to 524)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BE014142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: smith@email.marc.usda.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Design and use of two pooled tissue normalized cDNA libraries for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FORWARD: AGGAAACAGCTATGACCAT
                                                                                                                                                                                                                                                                                                                     136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRimers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -minmatch 12 options.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         discovery in swine
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Smith TPL
                                                                                                                                                                                                                                                                                                                   /note="Vector: pCMV SPORT6; Site_1: xbaI; Site_2: XhoI; Library made from pooled tissue from day 11, 13, 15, 20, and 30 embryos."

151 c 140 g 97 t
                                                                                                                                                                                                                                                                                                                                                                                            /clone_lib="MARC 1PIG"
/tissue_type="pooled"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Sus scrofa"
/db_xref="taxon:9823"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (2000)
                                                                                                                                                                                                                        44.3%;
92.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -ggtccaggcgcgtcagcgaggtgagcaacggcacgtcgag
                                                                                                                                                                                                        0;
                                                                                                                                                                                                      Score 457.4; DB 9;
Pred. No. 5.7e-113;
0; Mismatches 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 524 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                            524;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Laegreid, W.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Euteleostomi;
                                                                                                                                                                                                      0;
                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Casas, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          974
                                                                                                                                                                                                        0;
```

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
ORIGIN
                BASE COUNT
                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BG261691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 tgcagacagacaaccacccaaagacctctagggtccacctcattgtgcaagtatctccca 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 AGTACAGCATCGAGATCCAGAATGTGGACGTGTACGACGAGGGCCCGTACACCTGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tcaccgtgaactatccaccatacatttcagaagccaagggtac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ttggctttgtgagtgaagacgaatacttggaaattcagggcatcacccggggagcagtcag 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCAGACAGACAACCCCCAAGACCTCCCGGGTCCACCTCATTGTGCAAGTATCTCCCA 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCACCGTGAACTATCCTCCATACATTTCAGAAGCTAAGGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGACTACGAGTGCAGCGCCTCCAATGACGTGGCTGCTCCGGTGGTGCGGAGAGTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGGCTTTGTGAGTGAAGATGAATACTTGGAGATCCAGGGCATCACACGGGAGCAGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATAGCAACAGGTAGACCAGAGCCTACGGTGACCTGGAGACACATCTCCCCAAAAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gcatagcaactggtagaccagagcctacggttacttggagacacatctctcccaaagcgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; 1 (bases 1 to 979)

NIH-MGC http://mgo.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BG261691 979 bp r 602373361F1 NIH_MGC_94 Mus musculus
                                                                                                                                                                                                                                                                                                              CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM10315 row: i column: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA sequence.
                                                                                                                                                                                                                                                                        High quality sequence stop: 715
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tissue Procurement: The Cepko Laboratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BG261691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            house mouse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BG261691.1
                  231
          /clone_lib="NIH_MGC_94"
/tissue_type="retina"
/lab_host="DH10B (phage-resistant)"
/lab_host="DH10B (phage-resistant)"
/note="Organ: eye; Vector: pcMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally; oligo-dT primed.
Average insert size 3.3 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
a 261 c 289 g 198 t
                                                                                                                                                                                                                /organism="Mus musculus"
/db_xref="taxon:10090"
                                                                                                                                                                                               /clone="IMAGE:4480983"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GI:12771416
                                                                                                                                                                                                                                                          .979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cDNA clone IMAGE:4480983 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 13-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                 be
```

Best Local Similarity

44.1%;

Score 455; DB 10; Pred. No. 3.5e-112;

Length 979;

Query Match

```
RESULT 1
B1755360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                             g
                                                                                                             COMMENT
                                                                                                                                                             REFERENCE
                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                  VERSION
                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                             717
                                                                                                                                                                                                                                                                                                                                                                    681
                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                            602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     agccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAATGAAGGGAACAACATCAGCCTCACTTGCATAGCCACAGGTAGACCGGAGCCTACAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ggtccacctcattgtgcaagtatctccccaaaattgtagagatttcttcagatatctcccat 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTGGTCCTCCTGAGTAACACCCAGACCCAGTACAGCATTGAGATCCAGAATGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacytggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGCTAAACCGCAGTACCATCCTCTATGCTGGAAATGACAAGTGGTGCCTAGATCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGCAGGGGAGAGCGCCACCCTCAGGTGCACAATTGACAACCGAGTCACCCGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccggcagggggagagcgccaccctcaggtgcactattgacaaccggggtcacccgggtggc
                                                                                                                                                                                                                                                                                                                                                                                                         ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                                                                                                                                                                                                                                                                                                                                                                             GATCCAGGACATCACTCGGGAACAGTCAGGCGAGTACGAGTGCAGCGC - TCAACGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCCACCTCATTGTACAAGTATCTCCCCAAAATTGTAGAGATTTCTTCAGATATCTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGC--GGACCGTGGTACGAAGAGTGAAGGTC-CCGTGAACTATCACCATACATTCTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTTAGGG----CCCGGTGTCCCGTGGGGGCAGAAGGGGCTCTGCAGTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      562;
DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLAM11489 row: o column: 15
                                                                                                                                                                                                                                                                     BI755360 849 bp mRNA linear EST 25-SEP-20 603024964F1 NIH_MGC_114 Homo saplens cDNA clone IMAGE:5195750 5',
                                                                                    Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies,
                                                                                                                       Unpublished (1999)
                                                                                                                                   NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                           Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates; 1 (bases 1 to 849)
                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                    BI755360.1 GI:15746938
                                                                                                                                                                                                                                                            mRNA sequence
                                                                                                             Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                          Library Preparation: Life Technologies, Inc. Library Arrayed by: The I.M.A.G.E. Consortium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;08
                                                                                                                                     Gene
                                                                                                                                     Collection (MGC)
                                                                                                                                                                                                                                                                                 EST 25-SEP-2001
                                                             (LLNL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9.
                                    can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302
                                                                                                                                                                                                                                                                                                                                                                                                                   680
                                                                                                                                                                                                                                                                                                                                                                                                                                            659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                    be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ű
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                            γQ
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
            밁
                                 QΥ
                                                           g
                                                                                Q
                                                                                                           밁
                                                                                                                                 Qy
                                                                                                                                                           В
                                                                                                                                                                               Qy
                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                       뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                           624
                                                                                                                                                           564
                                                                                                                                                                                   500
                                                                                                                                                                                                           504
                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                          444
                                                                                                                                                                                                                                                                                380
                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                 320
                                                                                                                                                                                                                                                                                                                                                         324
                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                         264
                                                                                                                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                                                                                                       204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    579;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            218
```

```
744 TCAAAAGCCAAGAACACTGGTGTTTCAGTCCGGCAGAAGGGGCATCCTGAGCTGTGAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacgg 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCGGCAGGGGGAGAGCGCCACCCTCAGGTGTACCATAGATGACCGGGTAACCCGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACGG
                                                                                                                                                                                                                                                                                     TGACATGGAGACACCTGTCAGTCAACGAAGGCCCAGGGCTTTGTAAGTGAGGATGAGTACC
                                                                                                                                                                                                                                                                                                                                                                                                               ttaatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTGGCTAAACCGCAGCACCATCCTCTACGCTGGGAATGACAAGTGGTCCATAGACCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtgg 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATGTACCATCCTGCCTACTGGGTCGTCTTCTCGGCGACAACTGCCCTGCTCTTCATCC
                        tcagaagccaagggtacaggtgtccccgtgggacaaagggggacactgcagtgtgaagcc
                                                                                           ATGTCGCTGCGCCCGATGTGCGGAAAGTCACAAATCACTGTCAACTATCCTCCCTATATC
                                                                                                                       acgtggccgcgccgtggtacggagagt-aaaggtcaccgtgaactatccaccatacatt
                                                                                                                                                                                          TGGAGATCTCTGACATCAAGCGAGACCAGTCCGGGGAGTACGAATGCAGCGCCTTGAACG
                                                                                                                                                                                                                     tggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatg
                                                                                                                                                                                                                                                                                                                                ttacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatact
                                                                                                                                                                                                                                                                                                                                                                                    TGAATGAGGGAAGCAGTGTGACCCTGCTGTGTCTTGCTATTGGCAGACCAGAGCCAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGTTCACCTAATAGTGCAAGTTCCTCCTCAGATCATGAATATCTCCTCAGACATCACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTGATCATCCTGGTCAATACACCAACCCAGTACAGCATCATGATCCAAAATGTGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gcgtggtccttctgagcaacaccccaaacgcagtacagcatcgagatccagaacgtggatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        High quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                മ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Organ: brain; Vector: pCMV-SPORT6; Site_1: Not1; Site_2: EcoRV (destroyed); RNA source anonymous pool of 6 male brains, age range 23-27 yo. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.5 kb, insert size range 1-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 019. Note: this is a NIH_MCC Library."

a 239 c 227 g 165 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="IMAGE:5195750"
/clone_lib="NIH_MGC_114"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rocat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           43.6%;
76.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ion/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 450; DB 10;
Pred. No. 7.4e-111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches 175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                             675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79
803
                                                                                              743
                                                                                                                                                                                                                                           616
                                                                                                                                                                                                                                                                                          623
                                                                                                                                                                                                                                                                                                                                       556
                                                                                                                                                                                                                                                                                                                                                                                                                                     499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             203
                                                                                                                                                                                          683
                                                                                                                                                                                                                                                                                                                                                                                      563
                                               735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
```

```
Q
                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BE864555
Вþ
                                   20
                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                          Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          736 tcagcagtcccctcagcagaattccagtggtacaagga
                                            450
                                                                                                          390 cattgtgcaagtatctcccaaaattgtagagatttcttcagatatctcccattaatgaagg 449
                                                                                     11
71
                                                                                                                                                                                                   Local
GAACAACATCAGCCTCACTTGCATAGCCACAGGTAGACCGGAGCCTACAGTAACCTGGAG 130
                     gaacaatattagcctcacctgcatagcaactggtagaccagagcctacggtt%cttggag 509
                                                                                     CCTCTTCCAAGTATCTCCCAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGG 70
                                                                                                                                                                            483;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BE864555 53 bp mRNA linear EST 29-SEP-:
UI-M-BH1-akv-g-02-0-UI.rl NIH_BMAP_M_S2 Mus musculus cDNA clone
UI-M-BH1-akv-g-02-0-UI 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BE864555.1 GI:10385716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BE864555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA Library Preparation: M.B. Soares Lab Clone distribution: Researchers may obtain BMAP cDNA clones from RESEARCH GENTICS. It should be noted that Bento Soares is generating a small number of additional specialized non-redundant arrays of BMAP cDNAs whose availability will be considered under appropriate and limited
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bonaldo, M.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seq primer: M13 Reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: mEST@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tel: 301 443 1706 Fax: 301 443 9890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6001 Executive Blvd. Room 7N-7190, MSC 9643, Bethesda,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      National Institute of Mental Health
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Chin, H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Normalization and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       collaborative arrangements
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20892-9643, USA
                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases
                                                                                                                                                                                                                                                                                                                  154
                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                  D
                                                                                                                                                                                                                                                                                                                                                                             regions of the mouse brain (cerebellum, brain stems, olfactory bulbs, hypothalamus, cortex, amygdala, basal ganglia, pineal gland, striatum, hipoccampus). The driver used for subtraction consisted of a pool of 5,000 clones from the NIH_BMAP_M_S1 library and a pool of 2,000 clones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /dev_stage="27-32 days"
/lab_host="DH10B (Life Technologies)"
/lab_host="DH10B (Life Technologies)"
/note="Vector: pT773D-Pac (Pharmacia) with a modified
polylinker; Site_1: Not I; Site_2: Eco RI; The
NIH_BMAP_M_S2 library is a subtracted library derived from
NIH_BMAP_M_S1, which in turn is a subtracted library
derived from a mixture of normalized libraries from ten
                                                                                                                                                                                                                                                                                                                                   spinal cord
                                                                                                                                                                                                                                                                                                                                     obtained from non-normalized and normalized mouse brain spinal cord libraries."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:10090"
/clone="UI-M-BH1-akv-g-02-0-UI"
/clone_lib="NIH_BMAP_M_S2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Mus musculus"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 to 553)
                                                                                                                                                                                                                                                                                                                  140
                                                                                                                                                                                                 43.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lennon, G. and Soares, M.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     subtraction: two approaches
                                                                                                                                                                            0;
                                                                                                                                                                          Score 447.6; DB 10
Pred. No. 2.6e-110;
0; Mismatches 60;
                                                                                                                                                                                                                                                                                                                139 g
                                                                                                                                                                                                                                                                                                                  119 t
                                                                                                                                                                                                                      DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                  1 others
                                                                                                                                                                              Indels
                                                                                                                                                                                                                      Length 553;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 29-SEP-2000
                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     M
                                                                                                                                                                            Gaps
                                                                                                                                                                              0;
```

```
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1
BG706987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QΨ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccctc 749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaaggg 689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acacatctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGGAACTACACATGTGTGGCCTCCAACAAGCTGGGTCACACCAACGCCAGCATCATGCT 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccagcatcatgct 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctcttgaacatgacta 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agcagaattccagtggtacaaggatgacaaaagactgattgaaggaaaggaaaggagtgaa 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACAGGTGTCCCCGTGGGGCAGAAGGGGACTCTGCAGTGTGAAGCTTCCGCAGTCCCTTC 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTGGTACGAAGAGTGAAGGTCACCGTGAACTATCCACCATACATCTCAGAAGCTAAGGG 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCACTCGGGAACAGTCAGGCGAGTACGAGTGCAGCGCCTCCAACGACGTGGCGGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      att 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGGAAAACAGACCTTTCCTTTCANAACTCACCTTTTTCAACGTCTCTGAACATGACTA 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACATATTTCTCCCAAGGCCGTTGGCTTTGTGAGTGAGGATGAGTACCTGGAGATCCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCAGAATTTCAATGGTTCAAGGATGACAAAAGACTGGTCGAAGGAAAGAAGGGGAGTCAA 430
                                                                                                                                                                                                                                                                                                                                                                   Tissue Procurement: Miklos Palkovits, M.D., Ph.D. cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  602672194F1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:4794790 5',
                                                                                                                                                                                                                                                                                      Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOMO Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BG706987.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BG706987
                                                                                                                                                                                                                             http://image.llnl.gov
Plate: LLAM10676 row: l column:
                                                                                                                                                                                                                                                                                                                                                                                                            Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                          found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        numan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 633)
                                                                                                                                                                                                               quality sequence stop: 633.
pBluescript KS+); Site_1: BamHI; Site_2: SalI-XhOI (gtcgag
); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTTTTVN-3',
                                    /tissue_type="hypothalamus"
/lab_host="DH10B"
/note="Organ: brain; Vector: pBluescriptR (modified
                                                                                                                 /db_xref="taxon:9606"
/clone="IMAGE:4794790"
                                                                                           /clone_lib="NIH_MGC_96"
                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                      /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GI:13982882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        633 bp
                                                                                                                                                                                                                                   23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST 07-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 250
```

```
BASE COUNT
ORIGIN
                                                                                                                                                                                           Db
                                                                                                                                                                                                         QΥ
                                                             Ъ
                                                                            δÃ
                                                                                             B
                                                                                                          Qy
                                                                                                                             밁
                                                                                                                                           δÃ
                                                                                                                                                            В
                                                                                                                                                                        QΥ
                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                       QУ
               γ
                              g
                                            Qy
                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 447; Conserv
                                                                                                                                                                                          301
                                                                                            420
                                542
                                               361
                                                                                                                            194
                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                      size-selected for average insert size 2.3 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library." a 164 c 148 g 127 t
                                                                                                                                                                                                                                                                  41.0%; Score 423.2; DB 10; Length 633; 98.9%; Pred. No. 1.1e-103;
                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                                           Gaps
                                                                 541
                                                                                                                                                                                                                                                           2;
```

Search completed: July 11, 2002, 21:28:00 Job time: 10359 sec

```
Title:
Perfect score:
Sequence:
 Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0 Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM nucleic -
                                               Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
Query
Score Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic search, using sw model
                                                                                          July 11, 2002, 22:51:36; Search time 4995.85 Seconds (without alignments) 7091.611 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1797656 seqs, 10463268293 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-700-397-2
1693
                                                                                                                                                                                                                                                                                                                                                                                                                                GenEmbl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                gb_pr:*
gb_ro:*
gb_sts:*
                                                                                                                                                                                                                                                                                                                                             gb_ba:*
gb_htg:*
gb_in:*
gb_om:*
gb_ov:*
gb_pat:*
gb_ph:*
                                                                                       em_mu:*
em_on:*
em_or:*
em_ov:*
em_pat:*
em_ph:*
em_pl:*
em_pl:*
em_pl:*
em_vi:*
em_vi:*
em_vi:*
em_htg_hum:*
em_htg_other:*
em_htgo_inv:*
                                                                                                                                                                                                                                           em_fun:*
em_hum:*
em_in:*
                                                                                                                                                                                                                                                                         gb_sy:*
gb_un:*
gb_vi:*
em_ba:*
  ij
                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3595312
 Description
                                                                                                                                          RESULT
AF12642
LOCUS
DEFINIT
ACCESSI
VERSION
KEYWORK
SOURCE
                                                           몬
                                                                                                   æ
           Ŧ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        000
                                                                                                                                                                                                                                                                                                       C
                                                                                                                                                                                                                                                                           00
```

O C	,	O																															•	٠,	- \.								
4.4	43	42	41	40	9	38	37	36	<u>υ</u>	34	ယ	32	31	30	29	ಬ ಹ	27	26	25	24	23	22	21	20	19	18	7	<u>1</u> 6	15:	4	ء بد ا	<u>.</u> ب	1 2	2	ρα	> ~	10	את	ли	٠.	w t	V F	_
209.4	38		27	80.	98.	03.	ω ω	337.4	38.	38.	40.	40.	40.	40.	343	ω	48.		59.	36	30	<u>ب</u>	65.	65.	523	5	39	40	45	51	71	2 :	26	7 5	519.0	3.0	3 0	2 4		4 6	913	3 .	2
12.4	υ ,⊳ -	5	9	σ	7	7	9	9	0	0	0	0	0	0	0	0	0		_	_	oı	01	7	. 7				_	~ :		~ :	"	٠,٠	·· :	л л		٠.	⊸.	-:	~ :	~ :	٠.	
152686	42263	257	1809	1059	756	756	861	945	912	861	1017	1014	977	924	1238	1238	1194	2050	1158	1107	452	756	3216	2935	2337	2179	1478	3069	2593	1556	-	187203		n (202505	2	1620	1025	1257	1058	1410	2040	1830
N	o N	11	10	ហ	6	σ	6	6	6	6	9	6	6	σ	10	σ	υ	ψı	Ç	U	6	12	ъ	12	10	. س	9	<u>بر</u> 0	4	ψı (UT E	.	J1 1	۱ د) K) H	ے ر د	л	n (U F	10	70	٥
AC018913	00472	07361	в01	GGA132999	AR030590	AR030589	AR030582	AR030580	AR030578	AR030581	HSU41901	AR030577	AR030574	AR030579	RNU31554	AR030575	GGLAMPG11	GGE19SPRO	GGLAMPG19	GGLAMPG9	AX079423	AF271232	GGCEPUS	AF271618	RATCALMC	RATCALMB	HUMOBCAM	RATCALMA	BTOBCAM	AF292934	FFNINH55A	AP000832	AF292936	NC018368	AP004240	-1004040 -1004040	AE071033	AB011810	CEPHI	U 1 (AF282980	NUT 684	AF126426
AC018913 Homo sapi	HOMO	7361 human STS	B017139 Rattus n	w	30590 Sequenc	w		086	578		Ξ	77 Sec	74	79	20		294719 G.gallus mR	Y08171 Gallus gall	Z94720 G.gallus mR	294718 G.gallus mR	AX079423 Sequence	12	39	8 Synth	1	10 Rattı	L34774 Human (clon	M88709 Rattus norv	X12672 Bovine mRNA	AF292934 Gallus ga	Y08170 Gallus gall	AP000832 Homo sapi	AF292936 Gallus ga	ACO18368 Homo sapi	AP000912 Homo sapi	APOO4248 Homo sapi	AF271233 Synthetic	AB011810 Gallus ga	97 G.gallus	92935 Gall	F282980 Mus musc	16845 Rattus no	AF126426 Homo sapi

ALIGNMENTS

/organism="Homo sapiens"	
ce 1.,1839	source
Location/Qualifiers	EATURES
Sciences, 5 Dong Dan San Tiao, Beijing 100005, PR China	
Submitted (05-FEB-1999) Biochemistry, Institute of Basic Medical	JOURNAL
Direct Submission	TITLE
Li,G., Jin,J., Tan,X., Hu,S., Yuan,J. and Qiang,B.	AUTHORS
2 (bases 1 to 1839)	EFERENCE
Unpublished	JOURNAL
Cloning and identification of human neurotrimin full length cDNA	TITLE
Li,G., Jin,J., Tan,X., Hu,S., Yuan,J. and Qiang,B.	AUTHORS
1 (bases 1 to 1839)	EFERENCE
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	
<pre>Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1;</pre>	
	ORGANISM
human.	OURCE
	EYWORDS
AF126426.1 GI:7158997	ERSION
AF126426	CCESSION
N Homo sapiens neurotrimin (HNT) mRNA, complete cds.	EFINITION
AF126426 1839 bp mRNA linear PRI 06-MAR-2000	ocus
	F126426

```
BASE COUNT
ORIGIN
                                                                                    Qy
                                                                                                                                                                                                                                                                     γQ
                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                 Qγ
                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                   УŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
밁
                         δÃ
                                                         Дò
                                                                                                                    Βþ
                                                                                                                                              Qy
                                                                                                                                                                                 밁
                                                                                                                                                                                                             γQ
                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 85.1
Best Local Similarity 98.5
Matches 1472; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
 1005
                            870
                                                           945
                                                                                        810
                                                                                                                      885
                                                                                                                                                                                 825
                                                                                                                                                                                                                690
                                                                                                                                                                                                                                                                         630
                                                                                                                                                                                                                                                                                                                                      570
                                                                                                                                                                                                                                                                                                                                                                   645
                                                                                                                                                                                                                                                                                                                                                                                              510
                                                                                                                                                                                                                                                                                                                                                                                                                              450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        210
                                                                                                                                                                                                                                              765
                                                                                                                                                                                                                                                                                                         705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345 AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACGGT 404
                                                                                                                                                   750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 269
                                                                                                                                                                                                                                                                                                                                                                     GGTCCACCTCATTGTGCAAGTATCTCCCCAAAATTGTAGAGATTTCTTCAGATATCTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                             cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGCTAAACCGCAGCACCATCCTCTATGCTGGGAATGACAAGTGGTGCCTGGATCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctgggatcctcg 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGGCAGGGGGAGAGCGCCACCCTCAGGTGCACTATTGACAACCGGGTCACCCGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ccggcaggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc 329
                agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                         agccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtgaagcctcagc
                                                                                                                    ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                                                                                                                                 aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt 749
                                                                                                                                                                                                                                                             taatgaagggaacaatattagcotcacctgcatagcaacctggtagaccagagcctacggt 629
                                                                                                                                                                                                                                                                                                                                                                                   ggtccacctcattgtgcaagtatctccccaaaattgtagagatttcttcagatatctcccat 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTGGTCCTTCTGAGCAACACCCAAACGCAGTACAGCATCGAGATCCAGAACGTGGATGT
 AGTCCCCTCAGCAGAATTCCAGTGGTACAAGGATGACAAAAGACTGATTGAAGGAAAGAA
                                                           AGCCAAGGGTACAGGTGTCCCCCGTGGGACAAAAGGGGGACACTGCAGTGTGAAGCCTCAGC
                                                                                                                                                                                   AATTCAGGGCATCACCCGGGAACAGTCAGGGGGACTACGAGTGCAGTGCCTCCAATGACGT
                                                                                                                                                                                                                                                                                                         TAATGAAGGGAACAATATTAGCCTCACCTGCATAGCAACTGGTAGACCAGAGCCTACGGT
                                                                                                                                                                                                                                              464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="HNT"
265. .1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /translation="MGVCGYLFLPWKCLVVVSLRLLFLVPTGVPVRSGDATFFKAMDN VTVRQGESATLRCTIDNRYTRYAMLINEGTILYAGRINKWCLDPRVYLLSNYQTQYSIEI QNVDVYDEGPTYCSVQTDNHPKTSRYAWLLIVQVSKIVIEISIISINEGNNISLTCIAT GRPEPTYTWRHISPKAVGFVSEDEXLEJQGITREQSGDYECSASNIVAAPVVRRVKVT GRPEPTYTWRHISPKAVGFVSEDEXLEJQGITREQSGDYECSASNIVAAPVVRRWKVT WYYPPYISEAKGTGVPVGQKGTLQCEASAVPSAEFQWYKDDKRLIEGKKGVKVENRPF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LSKLIFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSEVSNGTSRRAGCVWLLP
LLVLHLLLKF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="neurotrimin"
/protein_id="AAF37591.1"
/db_xref="GI:7158998"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="similar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="HNT"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85.1%;
98.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                506 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1440.2;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             503 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                366 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1839;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    neurotrimin"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
 1064
                            929
                                                           1004
                                                                                        869
                                                                                                                      944
                                                                                                                                                   809
                                                                                                                                                                                                                                              824
                                                                                                                                                                                                                                                                         689
                                                                                                                                                                                                                                                                                                         764
                                                                                                                                                                                                                                                                                                                                                                     704
                                                                                                                                                                                                                                                                                                                                                                                                                              644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                464
                                                                                                                                                                                 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ۳.
```

OR OR REFE: AU' TI' JO! ME!	RESUL RNU16 LOCUS LOCUS DEFIN ACCES VERSI KEYWO	Qy	Qу	Qу	Qу	Qу	Qу	Qy Db	Qy Db	Qy Db	Qу	Qу	Qy Db	Qy Db
GANISM RENCE THORS THE DLINE	1785 r 2 845 rrion rrion sion sno	1630	1583 1725	1530 1665	1470 1605	1410 1545	1350 1485	1290 1425	1230 - 1365 -	1170	1110	1050	990 a	930 a
Rattus norvegicus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus. 1 (bases 1 to 2040) Struyk,A.F., Canoll,P.D., Wolfgang,M.J., Rosen,C.L., D'Eustachio,P. and Salzer,J.L. Cloning of neurotrimin defines a new subfamily of differentially expressed neural cell adhesion molecules J. Neurosci. 15 (3), 2141-2156 (1995) 95198094 2 (bases 1 to 2040)	CCACGGCGTGTGTGGAAACGTGAAATAAAAAGAGAGCAAAAAAAA	gaaacgi		tggagctggccatcccaaattcaatcagtccatagagacgaacga	tgccagtgtgggcaagggctcagcctctctgcccacagagtgcccccacgtggaacattc 1529 	ggaagaacacagcacacccggcttggacccactgcaagctgcatcgtgcaacctctttgg 1469 	aagaaattgaaaattgcottgcagatatttaggtacaatggagttttcttttc	tgggacagaaatttgagggaggggaacaaagaatactttggggggaaaaaagttttaaaa 1349 	gcaacacegacagcaaccaatcagatatatacaaatgaaattagaagaaacacagcctca 1289 	gtgccacttccccacccgggaaaggctgccgccaccaccaccaccaccaccaccaccaccaccatgcaatg 1229 	aggetgegtetggetgetgeetettetggtettgeacetgetteteaaattttgatgtga 1169 	catcatgetatttggtccaggegecgtcagegaggtgagcaacggcacgtcgaggagggc 1109 	acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccag 1049 	aggggtgaaagtggaaaacagacctttcctctaaaaactcatcttcttcaatgtctctga 989

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  рь
                   δÃ
                                                     Db
                                                                               δÃ
                                                                                                           g
                                                                                                                                       Qy
                                                                                                                                                                       B
                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
 1164
                                                                                                                1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                      1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     564
                           810
                                                                                                                                                                                                    630
                                                                                                                                                                                                                                924
                                                                                                                                                                                                                                                             570
                                                                                                                                                                                                                                                                                          864
                                                                                                                                                                                                                                                                                                                                                 804
                                                                                                                                                                                                                                                                                                                                                                            450
                                                                                                                                                                                                                                                                                                                                                                                                                                      390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        270
                                                                                   750
                                                                                                                                           690
                                                                                                                                                                       984
                                                                                                                                                                                                                                                                                                                    510
                                                                                                                                                                                                                                                                                                                                                                                                         744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cal Similarity
1262; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                        cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGCAGGGGGAGAGCGCCACCCTCAGGTGCACAATTGACAACCGAGTCACCCGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccggcagggggagagccccccctcaggtgcactattgacaaccgggtcacccgggtggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGAGTGCCGGTGCGTAGCGGAGATGCCACCTTTCCCAAAGCTATGGACAACGTGACGGT
                                                                       ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                                                GATCCAGGGCATCACTCGGGAGCAGTCAGGCGAGTATGAGTGCAGCGCCTCCAACGACGT
                                                                                                                               aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                                                                                                                                                taatgaagggaacgatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                                         GGTCCACCTCATTGTACAAGTATCTCCCCAAAATTGTAGAGATTTCTTCAGATATCTCCAT
                                                                                                                                                                                                                                                                                                         ggtccacctcattgtgcaagtatctcccaaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                             TGTGGTTCTCCTGAGTAACACCCCAGACCCAGTACAGCATTGAGATCCAGAATGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGCTAAACCGCAGTACCATCCTCTATGCTGGAAATGACAAGTGGTGCCTAGATCCTCG
               agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaasscctcagc
                                                                                                                                                                                       TAATGAAGGGAACAACATCAGCCTCACTTGCATAGCCACAGGTAGACCGGAGCCTACAGT
                                                                                                                                                                                                                                                                                                                                                  AGCTAAGGGTACAGGTGTCCCCGTGGGGCAGAAGGGGACTCTGCAGTGTGAAGCCTCGGC
                                                        GGCAGCACCAGTCGTACGAAGAGTGAACGTCACCGTGAACTATCCACCATACATCTCAGA
                                                                                                                                                                          Submitted (02-NOV-1994) James L. Sa.
Center, 550 First Avenue, New York,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Salzer, J.L.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /translation="MOCGYLFLPWKCLVVSLRLLFLVPTGVPVRSGDATFPKAMDN VTVROGESATLRCTTDNRYGTRVAMLNRSTILLYAGNKKCLLPRVVLLSNTQTQYSIEI QNVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKIVEIS: ISINEGNNISLTCIAT GREEPTYTWRHISPKAVGFVSEDBYLEIQGITREQSGEYEC: ASKURALVVRRVNVF VNYPPYISEAKKGTGVVPGQKGTLQCESAAVPSAEPGFWFKDKRIVEGKKGKVENRPP LSRLTFETMVSEBDYGNYTCVASNKLGHTNASIMLFGPGAVSFVNNGTSRRAGCIWLLP LLVLHLLLKF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /strain="Sprague-Dawley"
/db_xref="taxon:10116"
484. .1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product="neurotrimin"
/protein_id="AAA67445.1"
/db_xref="GI:755185"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="neural cell adhesion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  544 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59.2%;
84.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 551 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1002.2; DB 10; Pred. No. 4.3e-244;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    441 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Salzer, Cell Biology,
rk, NY 10016, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              198;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               molecule"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NYU Medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        623
                                                                                                                                                                                                                                                                                                                                                                                                                                         449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           329
                                                         1163
                                                                                                                                                                          1043
                                                                                                                                                                                                       689
                                                                                                                                                                                                                                                                629
                                                                                                                                                                                                                                                                                                                       569
                                                                                                                                                                                                                                                                                                                                                    863
                                                                                                                                                                                                                                                                                                                                                                                                            803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      743
   1223
                              869
                                                                                     809
                                                                                                                                             749
                                                                                                                                                                                                                                   983
                                                                                                                                                                                                                                                                                            923
                                                                                                                                                                                                                                                                                                                                                                               509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11
```

```
REFERENCE
AUTHORS
TITLE
                                                                                 KEYWORDS
SOURCE
ORGANISM
                                                                                                                                   LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                           γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                  Ω
                                                                                                                                                                                                                                                                               밁
                                                                                                                        VERSION
                                                                                                                                                                          AF282980
                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1170
                                                                                                                                                                                                                            1990
                                                                                                                                                                                                                                                                                                                                                                                                             1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1110
                                                                                                                                                                                                                                                      1633
                                                                                                                                                                                                                                                                                1930
                                                                                                                                                                                                                                                                                                        1573
                                                                                                                                                                                                                                                                                                                                                           1515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1050
                                                                                                                                                                                                                                                                                                                                  1870
                                                                                                                                                                                                                                                                                                                                                                                    1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gtgccacttccccaccegggaaaggctgccgccaccaccaccaccaccaacacaacagcaatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTCCCTTCAGCAGAATTTCAGTGGTTCAAGGATGACAAAAGACTGGTTGAAGGGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                                                                                                                                                                                                                                                                             ccacgtggaacattctggagctggccatcccaaattcaatcagtccatagagac--gaac
                                                                                                                                                                                                                                                                                                                                                                                                  tgcaacctctttggtgccagtgtgggcaagggctcagcctctctgcccac-agagtgccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tttaaaaaag--aaattgaaaattgocttgoagatatttaggtacaatggagt----ttt 1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tgggacagaaatttgagggaggggaacaaagaatacttt-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gcaacacogacagcaaccaatcagatatatacaaatgaaattagaagaaacacagcctca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aggctgcgtctggctgctgctcttctggtctttgcacctgcttctcaaaattttgatgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATCATGCTATTTGGCCCCAGGTGCTCTCAGCGAGGTCAACAATGGGACGTCAAGGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACACGACTATGGGAACTACACATGTGTGGCCATCCAACAAGTTGGGCCACACCAATGCCAG
                                                                                                                                                                                                                                                                                           agaatgagaccttccggcccaagcgtggcgcttgcgggcactttggtagactgtgccacca
                                                                                                                                                                                                                                                                                                                                                                                   TGTGACCTCTGTTGCCAGGGTGGGCAAGGGCTCAGCCACTCTGCCCACTAAAGTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTTTCCCAAATGGGAAGAA----GGCGCACCTAGCTTGGACCCACCCACAAGCTGCACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     cttttcccaaacgggaagaacacagcacaccggcttggaccca-ctgcaagctgcatcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAAAAAAAGGAAATTTGAAAATTGCCTTGCAGACATTTCGGTACCACTGAGTTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGCCCCTTCCCTGCCGGGGAGA-GCTGCTGCCACCGCATC--TCAATTCAACAGCACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGCTGCATTTGGCTCCTCCTCTTCTGGTCTTACACCTGCTCCTCAAATTTTGATGTGA
                                                                                                                                                                                                                              AGAGTGAGAAACAGGGGCCCAGAAGTGCCACGGAGGGCCCTTTGGTGGGCTGCGCGATGG
                                                                                                                                                                                                                                                                                                                                 CACCATGGAACATTCTGGAGTCGGCCATCCCCAAATTTCATCGGTCCATAGACACAAGCAC
Mammalia; Eutheria; Rodentia; Sciurognathi; Muri

1 (bases 1 to 1410)

Kim,T.H., Choi,S.C., Kim,J., Jeon,J.W., Kim,K.D.

Cloning and expression of mouse neurotrimin gene

nervous system
                                                                                  Mus musculus
                                                                                                                        AF282980.1
                                                                                                                                    Mus musculus
AF282980
                                                                                              house mouse
                                                                                                                                                             AF282980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -CAACATGAAGCAACAAGTCAGAATCAAATTAAATTCCGAGAATCACAGCC-AA
                                                                                                                        GI:12642539
                                                                                                                                                 neurotrimin
                                                                                                                                                           1410
                                                                                                                                                  mRNA,
                                                                                                                                                             đđ
                                                       Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                  p mRNA
complete
                                                                                                                                                  cds
                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -ggggggaaaaaagt 1342
                    and
in t
                    the
                                                                                                                                                                 ROD
                               Lee,
                                                                                                                                                               01-FEB-2001
                     developing
                                 ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          989
                                   .
H
                                                                                                                                                                                                                                                                                    1989
                                                                                                                                                                                                                                                                                                            1632
                                                                                                                                                                                                                                                                                                                                     1929
                                                                                                                                                                                                                                                                                                                                                             1572
                                                                                                                                                                                                                                                                                                                                                                                        1869
                                                                                                                                                                                                                                                                                                                                                                                                                 1514
                                                                                                                                                                                                                                                                                                                                                                                                                                           1809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1692
```

```
JOURNAL REFERENCE
                             20
                                                                Дb
                                                                                            Qγ
                                                                                                                             B
                                                                                                                                                         δÃ
                                                                                                                                                                                           В
                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                    Q.
                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                  рь
                                                                                                                                                                                                                                                                                                                                                                                                           γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
   밁
                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 1135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
   621
                               750
                                                                                                                                                                                            441
                                                                561
                                                                                                 690
                                                                                                                               501
                                                                                                                                                                                                                          570
                                                                                                                                                                                                                                                         381
                                                                                                                                                                                                                                                                                       510
                                                                                                                                                                                                                                                                                                                     321
                                                                                                                                                                                                                                                                                                                                                   450
                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                390
                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 269
 GGCGGCACCAGTGGTACCAAGAGTGAAGGTCACCGTGAACTATCCACCATACTTCTCAGA
                   ggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                 aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                                                TAATGAAGGGAACAACATCAGCCTCACTTGCATAGCCACAGGTAGGCCGGAGCCTACAGT
                                                                                                                                                                                                                                                                                                                                      cytgytccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGCTAAACCGCAGTACCATCCCCTATGCTGGAAATGACAAGTGGTGCCTAGATCCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGGCAGGGGGAGAGCGCCACCCTCAGGTGCACAATTGACAACCGAGTCACCCGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc
                                                             GATCCAGGGCATCACTCGGGAACAGTCAGGCGAGTACGAGTGCAGCGCCTCCAACGACGT
                                                                                                                             taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 629
                                                                                                                                                                                                                                                        GGTCCACCTCATTGTACAAGTATCTCCCAAAATTGTAGAGATTTCTTCAGATATCTCCAT
                                                                                                                                                                                                                                                                        ggtccacctcattgtgcaagtatctccccaaaattgtagagatttcttcagatatctccat 569
                                                                                                                                                                                                                                                                                                                     GTACGATGAGGGCCCTTATACCTGCTCGGTACAGATAGACAATCACCCTAAGACCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                  TGTGGTCCTCCTGGGTAACACCCAGACCCAGTACAGCATTGAGATCCAGAATGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGAGTGCCGGTGCGTAGCGGAGATGCTACCTTTCCCAAAGCTATGGACAACGTGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Direct Submission
Submitted (27-JUN-2000) Graduate School of Biotechnology, Korea University, 1,5-ka Anam-dong Sungbuk-ku, Seoul 136-701, Korea Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished 2 (bases 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kim, T.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /translation="MGVCGYLFLPWKCLVVVSLRLLFLVPTGVPVRSGDATFPKAMDN
'TVRQGESATLRCTILDRRVTRVAMLNRSTIPYAGANDKWCLDRRVLLGNTQTGYSIEI
QNVDVDEGPYTCSVQIDNHPKTSRVHLIVQVSPKIVEISSDISINEGANISLTCIAT
GREEFTVTWHHISRAVGFYSEDEYLQIGGITREQSGTYECSASNUVAAPVVFRVRVT
VNYPPYFSEAKGTGVPVGQKGTLQCEASAVESAEFQMFKDDKRLVEGKKGVKVENRPF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LLVLHLLLKF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /protein_id="AAK00276.1"
/db_xref="GI:12642540"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /product="neurotrimin"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LSKLTFFNVSEHDYGNYTCVASNKLGHTNASIMLFGPGAVSEVNNGTSRRAGCIWLLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="similar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="brain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /strain="ICR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Choi, S.C., Kim, J., Jeon, J.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    to 1410)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          to Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches 183;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        912.2; DB 10
No. 3.3e-221;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kim, K.D. and Lee, S.H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1410;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            neurotrimin"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                             809
                                                                                                                                                           689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
680
                                                             620
                                                                                                                             560
                                                                                                                                                                                           500
                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                   380
                                                                                                                                                                                                                                                                                                                                                   509
                                                                                                                                                                                                                                                                                                                                                                                  320
                                                                                                                                                                                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9;
```

```
REFERENCE
AUTHORS
                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Βþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                              Locus
                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                Вþ
                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                          QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                REFERENCE
                                                                                                                                                                         VERSION
                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                             AF292935
                                                                                                                                                                                                                                        RESULT
                                                   TITLE
                            JOURNAL
                                                                 AUTHORS
                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                              1390
                                                                                                                                                                                                                                                                                                        1518
                                                                                                                                                                                                                                                                                                                                                         1459
                                                                                                                                                                                                                                                                                                                                                                                   1270
                                                                                                                                                                                                                                                                                                                                                                                                                                     1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1050
                                                                                                                                                                                                                                                                                                                                                                                                             1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              681
                                                                                                                                                                                                                                                                            CATGGAACATTCTGGAGTCGG
                                                                                                                                                                                                                                                                                           cgtggaacattctggagctgg
                                                                                                                                                                                                                                                                                                                                               aacctctttggtgccagtgtgggcaagggctcagcctctctgcccac-agagtgccccca
                                                                                                                                                                                                                                                                                                                                                                                                                                                ttaaaaaa---gaaattgaaaattgccttgcagatatttaggtacaatggagttttcttt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gtgccacttccccacccgggaaaggctgccgccaccaccaccaccaccacacaacagcaatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattttgatgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCATGCTATTTGGTCCCGGTGCTGTCAGTGAGGTCAACAATGGGACATCAAGGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               catcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acatgactatgggaactacacttgcgtggcctccaacaagctgggccacacccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGAGTCAAAGTGGAAAACAGACCTTTCCTTTCAAAACTCACCTTTTTCAACGTCTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aggggtgaaagtggaaaacagacctttcctcaaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                                                                                               GACCTCTCTGTTGCCAGGGTGGGCAAGGGCTCAGCCACTCTGCCCCACTAAAGTGCCCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gcaaccaccgacagcaaccaatcagatatatacaaatgaaattagaagaaacacagcctca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGCCCCTTCCCTGCTGGGGAGA-GCTGCTGCCACCGCATC--TCAATACAACAGCACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGCTGCATTTGGCTCCTCCTCTTCTGGTCTTACACCTGCTCCTCAAATTTTGATGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTAAGGGCACAGGTGTCCCCCGTGGGGCAGAAGGGGACTCTGCAGTGTGAAGCTTCCGC
                                                                                                                                                                                                                                                                                                                                                                                   CTTTTCCCAAGTGGGAAGAAGGCACACCTAGCTTGGACCCACCACCAAGCTGCACTGTGT
                                                                                                                                                                                                                                                                                                                                                                                               -toccaaacgggaagaacacagcacacccggcttggaccca-ctgcaagctgcatcgtgc
                                                                                                                                                                                                                                                                                                                                                                                                                                     TTAAGAAAAGGAAATTTGGAAATTGCCTTGCAGATATTTCGGTACCGCTGAGTTTTCTTT
                                                                                                                                                                                  AF292935
Gallus gallus CEPU-Se alpha
AF292935
                                                                                                                    Gallus gallus
Eukaryota; Metazoa;
2 (bases 1 to 1058)
Lodge, A.P. and Moss, D.J
                                                  Characterisation of
                                       protein
                                                                                          Archosauria; Aves; N
Phasianinae; Gallus.
                                                                                                                                               chicken
                                                                                                                                                                         AF292935.1
                        Unpublished
                                                                 Lodge, A.P., McNamee, C.J.,
                                                                             (bases 1 to 1058)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAAATGAAGCAACAAGTCAGAATCAAATGAAATTCCGAGAATCACAGCC-AA
                                        CEPU-1
                                                                                                                                                                         GI:9887384
                                                                                                      Neognathae;
                                                                                                                                                                                                                                                                                                      1538
                                                   CEPU-Se,
                                                                                                                                                                                                                                                                              1410
                                                                                                                  Chordata;
                                                                                                                                                                                                              1058
                                                                Howard, M.R.,
                                                                                                                                                                                                2 isoform (CEPU-Se) mRNA,
                                               മ
                                                                                                                                                                                                            dq
                                                                                                       Craniata; Vertebrata; ; Galliformes; Phasian;
                                                  secreted
                                                                                                                                                                                                              mRNA
                                                                 Reed, J.E. and Moss, D.J.
                                                   isoform
                                                                                                                                                                                                              linear
                                                                                                       cebrata; Euteleostomi;
Phasianidae;
                                                   of
                                                   the
                                                                                                                                                                                                              VRT
                                                                                                                                                                                                complete
                                                 IgLON
                                                                                                                                                                                                 24-AUG-2000
omplete cds.
                                                                                                                                                                                                                                                                                                                                                         1517
                                                                                                                                                                                                                                                                                                                                                                                                             1458
                                                                                                                                                                                                                                                                                                                                                                                                                                     1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 989
                                                   family
```

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                          Вþ
                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                       뫄
                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                           δÃ
                                                              B
                                                                                         QY
                                                                                                                           В
                                                                                                                                                        Qy
                                                                                                                                                                                           В
                                                                                                                                                                                                                      Qy
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
563
                              647
                                                                503
                                                                                                587
                                                                                                                              443
                                                                                                                                                                                             383
                                                                                                                                                                                                                            467
                                                                                                                                                                                                                                                             323
                                                                                                                                                                                                                                                                                            407
                                                                                                                                                                                                                                                                                                                          263
                                                                                                                                                                                                                                                                                                                                                         347
                                                                                                                                                                                                                                                                                                                                                                                         203
                                                                                                                                                                                                                                                                                                                                                                                                                         287
                                                                                                                                                                                                                                                                                                                                                                                                                                                         143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     107
                                                                                                                                                             527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gaaaaagaagaagaaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatct
                                                                                                                                                                                                                                                                                                                                             ccatcctctatgctgggaatgacaagtggtgccttggatcctcgcgtggtccttctgagca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATGGGTGATCTTCGCCGGGATGGCCGCACTCCTCCTCCTTCCAAGGAGTGCCCCGTGCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cttgggcaatcttcacggggctggctgtctctgtgtctcttccaaggagtgcccgtgcgca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAGGAGGGGGAGGCACGCAGCTCCGAATATGGCCCCAGGCGAAAAATGCAGCACCCCGTCT
                                                                                                                                                                                                                                                                                                                                                                                                          ccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggctaaaccgcagca
CGCCCAAAGCTGTGGGCTTCATCAGCGAGGACGAGTACCTGGAGATCACAGGCATCACGA
                      TCAGCCTCACCTGCATAGCCACGGGCAGGCCAGACCCCACAATCACCTGGAGACACATCT
                                                                                  ttagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacacatct
                                                                                                                                AAGTGTCGCCGAAAATTACCGAGATCTCTTCTGACATCTCCATCAATGAAGGTGGCAACG
                                                                                                                                                 aagtatctcccaaaattgtagagatttcttcagatatctccattaatgaagggaacaata
                                                                                                                                                                                             ACACCTGCTCCGTGCAGACAGACAATCACCCCAAGACATCTCGCGTGCACCTCATTGTGC
                                                                                                                                                                                                                acacctgctcggtgcagacagacaaccaacccaaagacctctagggtccacctcattgtgc
                                                                                                                                                                                                                                                             ACACCAAAACCCAGTACAGCATCCAGATCCACGACGTGGACGTGTACGATGAAGGGCCCT
                                                                                                                                                                                                                                                                                  acacccaaacgcagtacagcatcgagatccagaacgtggatgttgtatgacgagggccctt
                                                                                                                                                                                                                                                                                                                            GCATCCTCTATGCCGGCAATGACAAGTGGTGCTTGGACCCGAGGGTGGTGCTCCTGGCCA
                                                                                                                                                                                                                                                                                                                                                                                           CCACGCTCAGGTGCTCCGTGGACAACCGCGTCACCCGCGTGGCCTGGCTGAACCGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACTGTGCGGCAAGGGGAGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gcggagatgccaccttccccaaagctatggacaacgtgacggtccggcagggggagagcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission Submitted (04-AUG-2000) Human Anatomy and Cell Biology, The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University of Liverpool,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VRQGESATLRCSVDNRYTRVAMLNRSSILYAGNDKWCLDPRVYLLANTKTQYSIQIHD
VDVYDEGPYTCSVQTDNHPKTSRVHLIVQYSPKITEISSDISINEGGNVSLTCIATGR
PDPTITWRHISPKAVGFISEDEYLEITGITREQSGEYECSASNDVAAPVVQRVKVTVN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="CEPU-Se"
52. .993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YPPYTSDAKSTGVPVGQKGTLMCEASAVPSADFQWYKDDKRLAEGQKGLKVENKAFFS
RLTFFNYSEQDYGNYTCVASNQLGNTNASMTLYGEQH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product="CEPU-Se alpha 2 isoform"
/protein_id="AAGO1878.1"
/protein_id="AAGO1878.1"
/db_xref="G1:9887885"
/translation="MAQAKMQHPVSWVIFAGMAALLLFQGYPVRSGDATFPKAMDNVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="CEPU-Se"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /dev_stage="E18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="IgLON family protein; secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /tissue_type="brain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 6.5e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 643.8; DB 5;
Pred. No. 6.5e-153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ashton Street, Liverpool, Merseyside L69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       178 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1058;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CEPU-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82
 622
                                 706
                                                                  562
                                                                                                646
                                                                                                                                502
                                                                                                                                                                586
                                                                                                                                                                                                442
                                                                                                                                                                                                                                 526
                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                              466
                                                                                                                                                                                                                                                                                                                              322
                                                                                                                                                                                                                                                                                                                                                              406
                                                                                                                                                                                                                                                                                                                                                                                            262
                                                                                                                                                                                                                                                                                                                                                                                                                            346
                                                                                                                                                                                                                                                                                                                                                                                                                                                           202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
GGCEPU1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Дò
                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1007
                                                                                                                                                                                                                                   sig_peptide
                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagggtacaggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACACCTGCGTGGCCTCCAACCAGCTAGGAAACACCAACGCCAGCATGATCCTTTATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acacttgcgtggcctccaacagctgggccacaccaatgccagcatcatgctatttggt 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acagacettteeteteaaaacteatettetteaatgtetetgaacatgactatgggaact 1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tccagtggtacaaaggatgacaaaagactgattgaaggaaaggaaaggggtgaaagtggaaa 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCGGTGGGGCAGAAGGGCATCCTGATGTGTGAAGCCTCCGCTGTGCCCTCTGCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tccccqtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccctcagcagaat 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGTGGTACAAAGACGACAAGCGGCTGGCTGAAGGACAGAAAGGGCTGAAGGTGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCGAGTCAAAGTCACCGTCAACTACCCACCGTACATCTCGGATGCGAAGAGCACCGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAAAGCCTTCTTCTCCCGACTGACTTTCTTCAACGTCTCCGAGCAGGACTACGGCAACT 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G.gall
Z72497
                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
Submitted (17-MAY-1996) Bru
Developmental Biology, Mol
Developmental Biology, Mol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Archosauria; Aves; Neognathae; Galliformes; Phasianinae; Gallus.
1 (bases 1 to 1257)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brain; CEPU-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bruemmendorf, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96370549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CEPU-1, a novel immunoglobulin superfamily by developing cerebellar Purkinje cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Spaltmann, F. and Brummendorf, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chicken.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCEPU1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .gallus mRNA for CEPU-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 1257)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Neurosci. 16 (5),
/translation="MAQAKMQHEVSWVIFAGMAALLLEQGYPVRSGDATEPKAMDNVT VRQGESATLECSUDRYTEVAKULNESSILYAGNDKWCLDERVVLLANTKTQYSTQIHD VDYDEGPYTCSVQTDNHPKTSRVLLITQYSPKITETSSDIS INEGGNYSTCIATGR DPTITWRHISPKAVGEISDEYLEITGITREQSGEXECSASNDVAAPVVQRVKVTVN XPPYISDAKSTGVPGQKGILMCEASAVPSADFQWYKDDKRLAEGOKGLKVENKAFFS RLTFFWYSEQDYGQNYTCVASNQLGNTNASMILYEETTTALTPKKGPGAVHDGNSGAWR RGSCAMLLALPLAQLARQF"
                                                                                                                                                                                                                                                  /dev_stage="E16"
88. .171
                                                                                                                                                                                                                                                                                 /clone="KB17"
/tissue_type="brain"
/clone_lib="lambda gt11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GI:1325950
                                                                                                                                                                                                                                                                                                                                 /organism="Gallus gallus"
/db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                   /db_xref="SWISS-PROT:Q90773"
                                                                                                                                                 /protein_id="CAA96578.1"
/db_xref="GI:1325951"
                                                                                                                                                                                 /evidence=experimental
/product="CEPU-1"
                                                                                                                                                                                                                   codon_start=1
                                                                                                                                                                                                                                   .1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            glycoprotein; GPI-anchor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1770-1779
                                                                                                                                                                                                                                                                                                                                                                                                               Molecular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1257
                                                                                                                                                                                                                                                                                                                                                                                                                 Bruemmendorf T., l
Molecular Biology,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ďď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein
                                                                                                                                                                                                                                                                                                                                                                                                                                  Max-Planck-Institute
                                                                                                                                                                                                                                                                                                                                                                                                                   Spemannstrasse 35,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   molecule,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VRT 29-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              742
                                                                                                                                                                                                                                                                                                                                                                                                                                      for
```

mat_peptide

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BASE COUNT
ORIGIN
                                                                             Qy
                                                                                                            DЬ
                                                                                                                                    Qy
                                                                                                                                                                 밁
                                                                                                                                                                                            Оy
                                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                               γ
                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
 망
                       Ωy
                                                      Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            107
                           1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     167
 959
                                                       899
                                                                                947
                                                                                                              839
                                                                                                                                        887
                                                                                                                                                                    779
                                                                                                                                                                                               827
                                                                                                                                                                                                                           719
                                                                                                                                                                                                                                                                                 659
                                                                                                                                                                                                                                                                                                                                       599
                                                                                                                                                                                                                                                                                                                                                                  647
                                                                                                                                                                                                                                                                                                                                                                                              539
                                                                                                                                                                                                                                                                                                                                                                                                                       587
                                                                                                                                                                                                                                                                                                                                                                                                                                                   479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               227
                                                                                                                                                                                                                                                    767
                                                                                                                                                                                                                                                                                                            707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGGGTGATCTTCGCCGGGATGGCCGCACTCCTCCTCCTAGGAGTGCCCCGTGCGCA
                                                                                                                                                                                                                                                                                                                                       CGCCCAAAGCTGTGGGCTTCATCAGCGAGGACGAGTACCTGGAGATCACAGGCATCACGA 658
                                                                                                                                                                                                                                                                                                                                                                                               TCAGCCTCACCTGCATAGCCACGGGCAGGCCAGACCCCACAATCACCTGGAGACACATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acacctgctcggtgcagacagacaaccacccaaagacctctagggtccacctcattgtgc 526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgacgagggccctt 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtccttctgagca 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCACGCTCAGGTGCTCCGTGGACAACCGCGTCACCCGCGTGGCCTGGCCTGAACCGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACTGTGCGGCAAGGGGAGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gcggagatgccaccttccccaaagctatggacaacgtgacggtccggcaggggggagagcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cttgggcaatcttcacggggctggctgctctgtgtctcttccaaggagtgcccgtgcgca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGGAGGGGGAGGCACGCAGCTCCGAATATGGCCCCAGGCGAAAATGCAGCACCCCGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gaaaaagaagaagaaaaaaaatcatgaaaaccatccagccaaaaaatgcacaattctatct 166
              acacttgcgtggcctccaacaagctgggccacaccaatgccagcatcatgctatttg 1063
                                                                                                                           tccccgtgggacaaagggggacactgcagtgtgaagcctcagcagtcccctcagcagaat
                                                                                                                                                                                                                                         ggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaagggtacaggtg
                                                                                                                                                                                                                                                                                                gggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgccgccgccgtggtac
                                                                                                                                                                                                                                                                                                                                                      ctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcagggcatcaccc
                                                                                                                                                                                                                                                                                                                                                                                                              ttagcctcacctgcatagcaactggtagaccagagcctacggttacttggagacacatct 646
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGTGTCGCCGAAAATTACCGAGACCTCTTCTGACATCTCCATCAATGAAGGTGGCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aagtatctcccaaaattgtagagatttcttcagatatctccattaatgaagggaacaata 586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACACCTGCTCCGTGCAGACAGACAATCACCCCAAGACATCTCGCGTGCACCTCATTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACACCAAAACCCAGTACAGCATCCAGATCCACGACGTGGACGTGTACGATGAAGGGCCCT 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCATCCTCTATGCCGGCAATGACAAGTGGTGCTTGGACCCGAGGGTGGTGCTCCTGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         760;
                                                                        acagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgactatgggaact 1006
                                                                                                              TCCAGTGGTACAAAGACGACAAGCGGCTGGCTGAAGGACAGAAAGGGCTGAAGGTGGAAA
                                                                                                                                                                    TGCCGGTGGGGCAGAAGGCCATCCTGATGTGTGAAGCCTCCGCTGTGCCCTCCGCTGACT
                                                                                                                                                                                                                           AGCGAGTCAAAGTCACCGTCAACTACCCACCGTACATTTCGGATGCGAAGAGCACCGGTG
ACACCTGCGTGGCCTCCAACCAGCTAGGAAACACCCAACGCCAGCATGATCCTTTATG 1015
                                                         ACAAAGCCTTCTTCTCCCGACTGACTTTCTTCAACGTCTCCGAGCAGGACTACGGCAACT
                                                                                                                                                                                                                                                                                 GGGAGCAGTCGGGCGAGTACGAGTGCAGTGCCTCCAACGACGTGGCCGCGCCTGTCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product="CEPU-1"
386 c 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      37.98;
79.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 641.8; DB 5;
Pred. No. 2.2e-152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches 197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1257;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       226
                                                         958
                                                                                                              898
                                                                                                                                        946
                                                                                                                                                                    838
                                                                                                                                                                                                                                                    826
                                                                                                                                                                                                                                                                                 718
                                                                                                                                                                                                                                                                                                             766
                                                                                                                                                                                                                                                                                                                                                                                               598
                                                                                                                                                                                                                                                                                                                                                                                                                                                    538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                       BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
          γQ
                                       В
                                                               QΥ
                                                                                              밁
                                                                                                                       QY
                                                                                                                                                    Дb
                                                                                                                                                                             Q_{\overline{Y}}
                                                                                                                                                                                                            g
                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AB011810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
             450
                                                                                                                           330
                                                                                                                                                      141
                                         261
                                                                   390
                                                                                               201
                                                                                                                                                                                270
                                                                                                                                                                                                                                                                                Local
```

```
밁
                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                        ccggcagggggggggccccccctcaggtgcactattgacaaccgggtcaccccgggtggc 329
cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 449
                                                                                                                                                          CTGGCTGAACCGCAGCATCCTCTATGCCGGCAATGACAAGTGGTGCTTGGACCCGAG
                                                                                                                                                                               ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                     GCGGCAAGGGGAGAGTGCCACGCTCAGGTGCTCCGTGGACAACCGCGTCACCCGCGTGGC
                                                                           GGTGGTGCTCCTGGCCAACACCCAAAACCCCAGTACAGCATCCAGATCCACGACGTTGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AB011810
AB011810.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Graduate School of Medical Sciences, Division of Developmental Neurobiology; 4-24-1 Kuhonji, Kumamoto, Kumamoto 862-0976, Japan (E-mail:ykimura@gpo.kumamoto-u.ac.jp, Tel:81-96-373-5294,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Archosauria; Aves; Neognathae; Galliformes; Phasiani
Phasianinae; Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               alternative splicing;
Gallus gallus cDNA to
Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kimura,Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (03-MAR-1998) Yoshishige Kimura, Kumamoto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kimura, Y., Shirabe, K. and Tanaka, H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Activity and Shows Dynamic Expression Spinal Cord
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CEPU-1: an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fax:81-96-373-5292)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (sites)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 1035)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      223
                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gallus mRNA for CEPU-1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LPLAQLARQF"
1 328 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HDVDVYDEGPYTCSVQTDNHPKTSRVHLIVQVSPKITEISSDISINEGGNVSLTCIAT
GRPDPTITWRHISPKAVGFISEDEYLEITGITREQSGEYECSASNDVAAPVVQRVKVT
VNYPPYISDAKSTGVPVGQKGILWCEASAVPSADFQWYKDDKRLAEGQKGLKVENKAF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /protein_id="BAA31514.1"
/protein_id="BAA31514.1"
/db_xref="G1:3398456"
/translation="MGVGGCLALPWRCLVVLCLRLLFLYPAGVPVRSGDATFPKAMDN
VTVRQGESATLRCSVDNRVTRVAWLNRSSILYAGNDKWCLDPRVVLLANTKTQYSIQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="alternative splicing product of CEPUl gene:EMBL
Acc# Z72497: Spaltman,F. and Bruendorf,T.(1996)
J.Neurosci.16:1770-1779."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Gallus gallus"
/db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FSRLTFFNVSEQDYGNYTCVASNQLGNTNASMILYGPGAVHDGNSGAWRRGSCAWLLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product="CEPU-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shirabe, K., Ful
Immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GI:3298455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .1035
                                                                                                                                                                                                                                                                                                                                                                                                                  37.7%;
                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CEPU-1.
                                                                                                                                                                                                                                                                                                                                                                                                 Score 638.2; DB 5;
Pred. No. 1.7e-151;
D; Mismatches 198;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    299 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fukushima, M., Takeshita, M. and Tanaka, H. lin Superfamily Molecule, Has Cell Adhesi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1035 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   p mRNA l
complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patterns
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chick Embryonic
                                                                                                                                                                                                                                                                                                                                                                                                                                           1035;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VRΤ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Adhesion
  380
                                                                                                                                                            260
                                                                                                                                                                                                 389
                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                   0;
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                       RESULT
AF271233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΔÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                         FEATURES
                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                   TITLE
                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                          ORGANISM
                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     570
                                                                                                                                                                                                                                                                                                                                                                                                                981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCTGTGCCTGGCTGGCCCTGCCGCTCGCCCAGCTCGCCCAGTTCTGA 1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                agccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATCACAGGCATCACGAGGGAGCAGTCGGGCGAGTACGAGTGCAGTGCCTCCAACGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACCTGGAGACACATCTCGCCCAAAGCTGTGGGCTTCATCAGCGAGGACGAGTACCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAATGAAGGTGGCAACGTCAGCCTCACCTGCATAGCCACGGGCAGGCCAGACCCCACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGTGCACCTCATTGTGCAAGTGTCGCCGAAAATTACCGAGATCTCTTCTGACATCTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccacatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCGAAGAGCACCGGTGTGCCGGTGGGGCAGAAGGGCATCCTGATGTGTAAGCCTCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCCGCCCTGTCGTCCAGCGAGTCAAAGTCACCGTCAACTACCCACCGTACATCTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                               aggctgcgtctggctgcctcttctggtcttgcacctgcttctcaaattttga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGATCCTTTATGGCCCCGGTGCAGTGCACGATGGCAACAGCGGTGCGTGGCGGCGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     catcatgctatttggtccagggcgccgtcagcgaggtgagcaacggcacgtcgaggagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGGACTACGGCAACTACACCTGCGTGGCCTCCAACCAGCTAGGAAACACCAACGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aggggtgaaagtggaaaacagacctttccttcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AF271233 1638 bp DNA Synthetic construct secretory IgCEPUS-GFP (IgCEPUS-GFP) gene, complete cds. AF271233 AF271233.1 GI:14161268
                                                                   Submitted (24-MAY-2000) College of Natural Resources and Science, Division of Biological Resources R-6517, Dong-A University, 840 Hadan-2 Dong Saha-Gu, Pusan 604-714, Repu
                                                                                                              2 (bases 1 to 1638)
Kim, D.-S. and Moss, D.J.
Direct Submission
                                                                                                                                                                                                                                          synthetic construct
                                                                                                                                                     Unpublished
                                                                                                                                                                                 Secretory IGCEPUS-GFP
                                                                                                                                                                                                Kim, D.-S.
                                                                                                                                                                                                                            artificial sequence
                                                                                                                                                                                                                                                       synthetic construct
                                                         Korea
                                                                                                                                                                                                              (bases 1 to 1638)
                                                                                                                                                                       lines
 /organism="synthetic construct"
/db_xref="taxon:32630"
                           Location/Qualifiers
1. .1638
                                                                                                                                                                                                and Moss, D
                                                                                                                                                                                    fusion
                                                                                                                                                                                   protein
                                                                                                                                                                                    expressions
                                                                                                                                                                                                                                                                                                                              linear
fusion p
                                                                                                                                                                                    in
                                                                                                                                                                                                                                                                                                                              protein
                                                                                                                                                                                     transfected
                                                                                                                                                                                                                                                                                                                                           SYN 21-MAY-2001
                                                                      Republic
                                                                                                                                                                                                                                                                                                                                                                                                                                            . 1164
                                                                                                  Lite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  740
δõ
```

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                             VΩ
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                           QY
                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                            Qy
                                                                                                                     Qy
                                                                                                                                                            Qy
                                                                                                                                                                                   Вb
                                                                                                                                                                                                     Qγ
                                                                                                                                                                                                                           밁
                     밁
                                     ΛÕ
                                                            Ъ
                                                                                                   B
                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                 486
                                                                                                                                           426
                                                                                                                                                               561
                                                                                                                                                                                     366
                                                                                                                                                                                                        501
                                                                                                                                                                                                                            306
                                                                                                                                                                                                                                               441
                                                                                                                                                                                                                                                                   246
                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                           186
                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                     126
                                                                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hes 734;
 801
                     909
                                                             546
                                                                                 681
                                                                                                                                                                                                                                                                                                                                                                                            66
                                                                                                                                                                                                                                                                                                                                                                                          totottocaaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaa
                                                                      atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctc
                                                                                                                                                      tatotocattaatgaagggaacaatattagcotoacotgcatagcaactggtagacoaga
                                                                                                                                                                                               gacctctagggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcaga
                                                                                                                                                                                                                                                                                                                     cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac
catttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga
                                                                                                             GGACCCGAGGGTGGTGCTCCTGGCCAACACCAAAACCCAGTACAGCATCCAGATCCACGA
                                                                                                                                                                                                                                                                              ggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaa
                                                                                                                                                                                                                                                                                                          CCGCGTGGCCTGAACCGCAGCAGCATCCTCTATGCCGGCAATGACAAGTGGTGCTT
                                                                                                                                                                                                                                                                                                                                                  CGTGACTGTGCGGCAAGGGGAGAGTGCCACGCTCAGGTGCTCCGTGGACAACCGCGTCAC
                      CAACGACGTGGCCGCCTGTCGTCCAGCGAGTCAAAGTCACCGTCAACTACCCACCGTA
                              caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccata
                                                             GTACCTGGAGATCACAGGCATCACGAGGGAGCAGTCGGGCGAGTACGAGTGCAGTGCCTC
                                                                                                    CCCCACAATCACCTGGAGACACATCTCGCCCAAAGCTGTGGGCTTCATCAGCGAGGACGA
                                                                                                                                            CATCTCCATCAATGAAGGTGGCAACGTCAGCCTCACCTGCATAGCCACGGGCAGGCCAGA
                                                                                                                                                                                    GACATCTCGCGTGCACCTCATTGTGCAAGTGTCGCCGAAAATTACCGAGATCTCTTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product="secretory IgCEPUS-GFP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="IgcEPUS-GFP"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="SooCI-517; IgCEPUS derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="IgCEPUS-GFP"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 623.6;
Pred. No. 9.8e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ).8e-148;
nes 184;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1638;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                     65
                                                                                                                                                                                                                                                                                                                                  380
                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                             245
                                                                                                                                                                                                                                                                                                                                                                          320
                                                                                                                                                                                                                                                  500
                                                                                                                                                                                                                                                                      305
                                                                                                                                                                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                      185
                       665
                                           800
                                                               605
                                                                                  740
                                                                                                     545
                                                                                                                         680
                                                                                                                                              485
                                                                                                                                                                  620
                                                                                                                                                                                       425
                                                                                                                                                                                                           560
                                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
```

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AP004248/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1041 caatgccagcatcatgct 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       981 tgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacac 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 861 agcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattga 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   666 CATCICGGATGCGAAGAGCACCGGTGTGCCGGTGGGGCAGAAGGGCCATCCTGATGTGTGA 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaaactcatcttcttcaa 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCGGTCGCCACCATGGT 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (12-OCT-2001) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagava 230-0045, Japan (E-mail:hattori@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APO04248 190864 bp DNA linear Homo sapiens chromosome 11 clone RP11-709M17 map I SEQUENCE, 14 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 190864)
Hattori, M., Ishii, K., Toyoda, A., Taylor, T.D., Hong-Seog, P., Fujiyama, A., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y. Homo sapiens genomic DNA of 11q
Published Only in Database (2001) In press
2 (bases 1 to 190864)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HTG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hattori,M., Ishii,K., Toyoda,A., Fujiyama,A., Yada,T., Totoki,Y.,
                                                                                                                 14 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens DNA, clone:RP11-709M17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AP004248.1 GI:16117845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AP004248
                                               preserved
                                                                      as soon as it is available and the accession number will be
                                                                                               are unknown.
                                                                                                                                                                NOTE: This is a 'working draft' sequence. It currently consists of 14 contigs. The true order of the pieces is not known and their
                                                                                                                                                                                                                                                                                 Sequencing vector: PCR products; 100% of reads Chemistry: Dye-terminator ET-amersham; 100% of Reads Assembly program: Phrap; version 0.990329 Consensus quality: 187825 bases at least 040 Consensus quality: 188959 bases at least 030 Consensus quality: 189416 bases at least 020
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Center project name: HumDraftll Center clone name: RP11-709M17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
                                                                                                                                                                                                                                         Insert size: 189564; sum-of-contigs
Quality coverage: 8.51x in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center code: RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Center: RIKEN Genomic Sciences Center(GSC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HTGS_PHASE1; HTGS_DRAFT
  46064
                                                                                               This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genome Center
  45963 contig of
73066 contig of
  45963
27003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Taylor, T.D., Hong-Seog, P., Watanabe, H. and Sakaki, Y.
bp in
  length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       map Ilq, WORKING DRAFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HTG 13-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                              reads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
```

```
misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
misc_feature
                                                             misc_feature
                                                                                                                      misc_feature
                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_teature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73167 99513 contig of 26347 bp in length
99614 117880 conrig of 18267 bp in length
117981 129001 contig of 11021 bp in length
129102 137233 contig of 8132 bp in length
137314 14978 contig of 7645 bp in length
145079 152269 contig of 7191 bp in length
152370 159751 contig of 7191 bp in length
152370 159751 contig of 7794 bp in length
152370 159752 contig of 7703 bp in length
167626 174628 contig of 7003 bp in length
167626 174628 contig of 7929 bp in length
167479 182657 contig of 7929 bp in length
174729 182657 contig of 5494 bp in length
182758 198644 contig of 5494 bp in length
182758 198654 bp in length
182758 198654 bp in length
182758 198654 bp in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         137234 137333: gap of 137334 144978: cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              167526 167625: gap of 100 bp
167626 174628: contig of 7003 bp in
174629 174728: gap of 100 bp
174729 182657: contig of 7929 bp in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            117881 117980: gap of 100 bp
117981 129001: contig of 11021 k
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             l88252 188351: gap of
l88352 190864: cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    L82658 182757: gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           159857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           159752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      129002 129101:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73067 73166: gap of 100 bp
73167 99513: contig of 26347 bp in length
99514 99613: gap of 100 bp
99514 117880: contig of 18267 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45964 46063: gap of 100 bp
46064 73066: contig of 27003 bp in length
                                                                                                                                                                                                                                          /note="assembly_fragment" 129102. .137233
                                                                                                                                                                                /note="assembly_fragment clone_end:SP6 vector_side:right"
137334. .144978
                                                                                                                                                                                                                                                                                                                                                                           99614.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46064. .73066
                                                         /note="assembly_fragment"
152370. .159751
                                                                                                                          145079
                                                                                                                                             /note="assembly_fragment clone_end:T7 vector_side:left"
                                                                                                                                                                                                                                                                                                              117981.
                                                                                                                                                                                                                                                                                                                                                                                                                                     73167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /map="11q"
   /note="assembly_fragment'
159852. .167525
                                                                                                                                                                                                                                                                                                                                        /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                     /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .45963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="RP11-709M17"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /chromosome="11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                               note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     159851: gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  152369:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         145078:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .19086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5078: gap of 100 k
152269: contig of 7191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       188251:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2369: gap of 100 bp
159751: contig of 7382 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101: gap of 100 b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       45963: contig of 45963 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67525:
                                                                                                                                                                                                                                                                                                                                                                                                                                        .99513
                                                                                                                                                                                                                                                                                                                                                                              .117880
                                                                                                                          .152269
                                                                                                                                                                                                                                                                                                                 .12900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ap of 100 bp contig of 5494 bp in rap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ap of 100 bp contig of 7645 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 contig of 7382 bp in length ap of 100 bp contig of 7674 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             contig of 2513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               bp in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                đq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  length
```

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                                                                                  рЬ
                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                            밁
                                                   KEYWORDS
                                                                                                                         DEFINITION
                                                                                                                                                           AP000912/c
                                                                                                                                                                              RESULT
                                                                      VERSION
                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 624;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74346 CAACCAATCAGATATATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATT 74287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74466 CTGCTGCCTCTTCTGCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCC 74407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1063 ggtccaggcgccqtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctgg 1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1123 ctgctgcctcttctggtcttgcacctgcttctcaaattttgatgtgagtgccacttcccc 1182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_teature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1243 caaccaatcagatatatacaaatgaaattagaagaaacacagcctcatgggacagaaatt 1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          accegggaaaggetgeegeeaceaceaceaceacaacaacageaatggeaacaeegacag 1242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTCCAGGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGG 74467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aagggetcageetetetgeecacagagtgeececaegtggaacattetggagetggeeat 1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acacccggcttggacccactgcaagctgcatcgtgcaacctctttggtgccagtgtgggc 1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAGGGAGGGGAACAAAGAATACTTTGGGGGGAAAAAAAGTTTTAAAAAAGAAATTGAAAA 7422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tgagggagggaacaaagaatactttggggggaaaaaagttttaaaaaagaaattgaaaa 1362
                                                                                                                                                                                                                                      GAGCAAGAAAGAAAAGGAAACAAAATAAGA 73896
                                                                                                                                                                                                                                                       gagcaaaaaaaaaaaaaaaaaaaaaaa 1693
                                                                                                                                                                                                                                                                                                                                 ctgcgggcactttggtagactgtgccaccacggcgtgtgttgtgaaacgtgaaataaaaa 1662
                                                                                                                                                                                                                                                                                                                                                                                    CCCAAATTCAATCAGTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACACCCGGCTTGGACCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGCCTTGCAGATATTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ttgccttgcagatatttaggtacaatggagttttcttttcccaaacgggaagaacacagc 1422
                                                                                                                                                                                                                                                                                                            CTGCGGGCACTTTGGTAGACTGTGCCACCACGGCGTGTGTTGTGAAACGTGAAATAAAAA 73927
                                                                                                                                                                                                                                                                                                                                                                                                                   cccaaattcaatcagtccatagagacgaacagaatgagaccttccggcccaagcgtggcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGGCTCAGCCTCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCAT 74047
                                                                                                                                              AP000912
                   Homo sapiens
                                  HTG; HTGS_PHASE1; HTGS_DRAFT.
HOMO sapiens DNA, clone:RP11-715K6
                                                                      AP000912.2 GI:8119054
                                                                                     AP000912
                                                                                                        DRAFT SEQUENCE, 28 unordered pieces.
                                                                                                                     Homo sapiens chromosome 11 clone RP11-715K6
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54344 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="assembly_fragment"
188352. .190864
/note="assembly_fragment"
40639 c 40476 g 54105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="assembly_fragment"
182758. .188251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="assembly_fragment"
174729. .182657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="assembly_fragment"
167626. .174628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36.6%;
98.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 619.8; pb.,
                                                                                                                                            202505 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               54105 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1300 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           190864;
                                                                                                                                              HTG 30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                               WORKING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        1602
                                                                                                                                                                                                                                                                                                                                                                                      73987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           74167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
```

```
and Chemical Research (RIKEN), Genomic Sciences Center (GSC); kitasato Univ. 1-15-1 kitasato, Sagamihara, Kanagawa 228-8555, Japan (E-mail:hattori@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923, Fax:81-42-778-9924)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 202505)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hon
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and
Homo sapiens 202,505 genomic DNA of 11q25
                                                      NOTE: This is a 'working draft' sequence. It currently consists of 28 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direct Submission Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
are unknown. This record will be assoon as it is available and the accession number will be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       On May 31, 2000 this sequence version replaced gi:6997729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Published Only in DataBase (1999) In press
2 (bases 1 to 202505)
                                                                                                                                                                                                                                                                                                                  Sequencing vector: PCR products; 100% of reads Chemistry: Dye-terminator ET-amersham; 100% of Assembly program: Phrap; version 0.990329 consensus quality: 183541 bases at least Q40 consensus quality: 192478 bases at least Q30 consensus quality: 196692 bases at least Q20 Insert size: 199805; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center project name: HumDraftll Center clone name: RP11-715K6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
                                                                                                                                                                                                                                                                                      Quality coverage: 4.09x in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Center code: RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Center: RIKEN Genomic Sciences Center(GSC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   --- Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Summary Statistics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hong-Seog, P., and Sakaki, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  reads
```

preserved length

sequence updated (26-May-20
* NOTE: This is a 'working
* consists of 28 contigs. T 166777 171622 175851 178798 1178798 183980 186787 186787 118610 191429 112474 91489 103071 198753 197776 48671 65351 78516 26198 197675 198652 193900 195695 183879 186686 $\frac{133003}{142050}$ 102970 112373 123106 188509 156216 48570 65250 78415 202505 199845 178697 161217 150046 contig 12873 26097 22373 16580 10633 11482 4129 2847 5082 2707 6070 1695 \$\frac{1}{2} \quad in length length

The true order draft' sequence.

of

the pieces

It currently

as be

123207

112373:

soon as

preserved

```
is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N. but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                        198652; contig of 100 bp in length 198653 198752; gap of 100 bp in length 198753 199845; contig of 100 bp 199753 199845; contig of 1093 bp in length 199946 199945; gap of 1093 bp in length 199946 199945; gap of 1093 bp in length 199946 199945; gap of 1093 bp in length 199846; contig of 1093 bp in length 19985; gap of 1095 bp in length 19985; gap of 19985; ga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         178798 183879: contig of 5082 bp in le
18380 183979: gap of 50082 bp in le
18380 183979: gap of 2707 bp in le
186687 186686: gap of 100 bp
186787 188509: contig of 1723 bp in le
186510 188609: gap of 100 bp
188610 191228: gap of 2719 bp in le
191329 191428: gap of 100 bp
191429 193900: contig of 2719 bp in le
191320 193900: contig of 272 bp in le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100 L

200 L

201 L

202 Sap of 100 bp

242151 150046: contig of 7896 bp

150047 150146: gap of 100 h

150217 156216: conti-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65251 65350: gap of 100 bp in length 65351 78415: contig of 13065 bp in length 78416 78515: gap of 100 bp 78516 91388: contig of 12873 bp in length 91389 91488: gap of 100 bp 91489 102970: contig of 11482 bp in length 102971 103070: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                 100 by
197675: contig of 1880 bp
197676 197775: gap of 100 bp
197776 198652: contig of 100 bp
198653 1000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              112374 112473: gap of
112474 123106: cont
                                                                                                                                                                                                                                                                             200983 201082: gap of 201083 202505: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          166677 166776: gap of 171521: contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61218 161317: gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ont.
3: gap of
142050: contin
51 142150: σ»
1 1ες
                                         /note="assembly_fragment"
26198. .48570
                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                     /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26097: contig of 26097 bp in length
26197: gap of 100 bp
48570: contig of 22373 bp in length
48670: gap of 100 bp
65250: contig of 16580 bp in length
/note="assembly_fragment"
#8671. .65250
                                                                                                                /clone="RP11-715K6"
                                                                                                                                                               /chromosome="11"
                                                                                                                                                                                                           'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             123206: gap of 100 bp
133003: contig of 9797 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              195695; CC 95706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183879: CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   178697: cc 8797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           it is available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              71621: gap of 100 bp
175750: contig of 4129 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       161217: cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100 bp in length 6: contig of 5359 bb :- gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gap of 100 bp: contig of 2847 bp in 1 gap of 100 bp: contig of 5082 bp in 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ap of 100 bp
contig of 6070 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ap of 100 bp
contig of 9303 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ap of 100 bp
contig of 8947 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ap of 100 bp
contig of 10633 k
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               contig of 1695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100 bp
: 4745 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100 bp
                                                                                                                                                                                                                                                                                100 bp
1423 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ďď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bp in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bp in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ni dq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           in
                                                                                                                                                                                                                                                                                  'n
                                                                                                                                                                                                                                                                                  length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       length
밁
                                                                                                                                                                                     Вb
                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                       бÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db 143589 GGTCCAGGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 623;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                     143409
143289
                                                                                                                                                                                                                                                                                143469
                                                                                                                                                                                                                                                                                                                                                                             143529
                                                                                                                                                                                                                                                                                                                                                                                                 1123 ctgctgcctottctggtcttgcacctgcttctcaaattttgatgtgagtgccacttcccc 1182
                                                                                                                                                                                                                                 1243
                                                                                                                                                                                                                                                                                                                              1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1063 ggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggcaggctgcgtctgg 1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                              caaccaatcagatatatacaaatgaaattagaagaaacacagcctcatgggacagaaatt
                                                                                                                                                                                                                                                                                                                                                                      TTGCCTTGCAGATATTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGC
                                                                                                                                                                                   CAACCAATCAGATATATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATT
                                                                                                                                                                                                                                                                             ACCCGGGAAAGGCTGCCGCCACCACCACCACCAACACACAGCAATGGCAATGGCAACACCGACAG
                                                                                                                                                                                                                                                                                                   accogggaaaggctgccgccaccaccaccaccaccaacaacagcaatggcaacaccgacag
                   ttgccttgcagatatttaggtacaatggagttttcttttcccaaacgggaagaacacagc 1422
                                                                                                              tgagggagggaacaaagaatactttggggggaaaaaagttttaaaaaaagaaattgaaaa
                                                                                        TGAGGGAGGGGAACAAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAAGAAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="assembly_fragment"
65351..78415
note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="assembly_fragment"
171622. .175750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91489. .102970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="assembly_fragment"
197776. .198652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              166777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 142151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               112474. .123106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           103071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    78516. .91388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="assembly_fragment clone_end:T7 vector_side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="assembly_fragment"
175851. .178697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="assembly_fragment clone_end:SP6 vector_side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="assembly_fragment"
156317. .161217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     150147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  133104. .142050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               191429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           188610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        note="assembl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note="assembly_fragment"
94001. .195695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36.5%;
98.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . .156216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .17152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .188509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .191328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .150046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .166676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .197675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .18387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .133003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .186686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .193900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 618.2; DB 2;
Pred. No. 5.7e-146;
0; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .y_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 202505;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                         1362
                                                                                                                                                                                                                                                                                                                                 1242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        143530
143230
                                                                                                                                                                                       143350
                                                                                                                                                                                                                                      1302
                                                                                                                                                                                                                                                                                  143410
                                                                                                                                                                                                                                                                                                                                                                             143470
                                                                                          143290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
```

71522 171621:

166676

75751 175850:

78698 178797:

FEATURES

194000:

source

misc_feature misc_feature misc_feature

.26097

```
Db 143049 CTGCGGGCACTTTGGTAGACTGTGCCACCACGGGGTGTGTTGTGAAACGTGAAATAAAAA 142990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db 143109 CCCAAATTCAATCAGTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
AC018368/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143169 AAGGGCTCAGCCTCTCTCCAGAGAGTGCCCCACGTGGAACATTCTGGAGCTGGCCAT 143110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1543 | cccaaattcaatcagtccatagagacgaacagaatgagaccttccggcccaagcgtggcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1483 aagggctcagcctctctgcccacagagtgcccccacgtggaacattctggagctggccat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1423 acacccggcttggacccactgcaagctgcatcgtgcaacctctttggtgccagtgtgggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gagcaaaaaaaaaaaaaaaaaaaaaaaa 1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgcgggcactttggtagactgtgccaccacggcgtgtgttgtgaaacgtgaaataaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGCAAGAAAAAAAGGAAAACAAAATAAGA 142959
                                                                                                                                                                                                                                                                                                                                                          Direct Submission
Submitted (10-DEC-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 03141, USA on Apr 7, 2000 this sequence version replaced gi:6649510.
All repeats were identified using RepeatMasker:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Macdonald, P., Marquis, N., McEwan, P., McGurk, A., McKernan, K., Meldrim, J., Morrow, J., Naylor, J., Norman, C.H., O'Connor, T., O'Donnell, P., Peterson, K., Pierre, N., Pollara, V., Riley, R., Rothman, D., Roy, A., Santos, R., Severy, P., Stange-Thomann, N., Stojanovic, N., Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J., Tirrell, A., Vassiliev, H., Viel, R., Vo, A., Wu, X., Wyman, D., Ye, W.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Birren,B., Linton,L., Nusbaum,C., Lander,E., Abraham,H., Allen,N., Anderson,S., Baldwin,J., Barna,N., Beckerly,R., Beda,F., Boguslavkiy,L., Boukhgalter,B., Brown,A., Castle,A., Colangelo,M., Collins,S., Collymore,A., Cooke,P., DeArellano,K., Dewar,K., Domino,M., Doyle,M., Fenestor,J., Ferreira,P., Fitzlugh,W., Eorrest,C., Gage,D., Galagan,J., Gardyna,S., Grant,G., Hagos,B., Heaford,A., Horton,L., Howland,J.C., Johnson,R., Jones,C., Kann,L., Karatas,A., Klein,J., Landers,T., Lehoczky,J., Lieu,C., Locke,K., Macchand, A., Klein,J., Landers,T., Lehoczky,J., Lieu,C., Locke,K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 184716)
Birren,B., Linton,L., Nusbaum,C. and Lander,E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AC018368
AC018368.4 GI:7523732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens chromosome 11 clone RP11-29113 map 11, WORKING DRAFT SEQUENCE, 13 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HTG; HTGS_PHASE1; HTGS_DRAFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens chromosome 11, clone RP11-29L13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AC018368
                                                                                                                                                                                                                                                                                                              http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 184716)
Sequencing vector: M13; M77815; 100% of reads Sequencing vector: M13; M77815; 100% of reads Chemistry: Dye-terminator Big Dye; 100% of reads Assembly program: Phrap; version 0.960731
                                                                                                                                                       Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                   Center clone name: 29_L_13
                                                                                                                              Center project name: L1344
                                                                                                                                                                                                           Web site: http://www-seq.wi.mit.edu
                                                                                                                                                                                                                                         Center code: WIBR
                                                                                                                                                                                                                                                               Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                            A.F.A. & Green, P. (1996-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and Zody, M.
                                                                                                                                                                                                                                                                                              Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184716 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                        of reads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HTG 07-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                        misc_feature
                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                               misc_feature
                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21845
                                                                                                                                                                                                                                                                                                                                                                                                 /note="assembly_fragment"
9179. .16020
                           /note="assembly_fragment"
87706. .125027
                                                                                                                                                                                                                                                                                           /note="assembly_fragment"
21845. .29796
                                                                                                                                                                                        42816
  /note="assembly_fragment
                                                                                                                                                                                                           /note="assembly_fragment"
                                                                                                     /note="assembly_fragment"
                                                                                                                                                          /note="assembly_fragment"
                                                                                                                                                                                                                                                               /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                        /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note="assembly_fragment"
```

.9078

21744

.54277

.87605 .69399

```
NOTE: This is a 'working draft' sequence. It currently consists of 13 contigs. The true order of the places is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        as soon as it is available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Consensus quality: 173786 bases at least Q40 Consensus quality: 178863 bases at least Q30 Consensus quality: 180884 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Insert size: 176000; agarose-fp
Insert size: 183510; sum-of-contigs
Quality coverage: 4.6 in Q20 bases; agarose-fp
Quality coverage: 4.4 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                              69400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16021
16121
21745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29897 427
42716 42815:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 1102: contig of 1102 bp in length
1103 1202: gap of 100 bp
1203 2255: contig of 1053 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2256 2355:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2355: contig of 1053 bp in length 256 2355: gap of 100 bp 356 3745: contig of 1390 bp in length 46 3845: gap of 100 bp 9078: contia of 500 bp 79 arro
                                                                                                                                                                                                                                                                                                                                                                                                45 21844: gap of 100 bp
45 29796: contig of 7952 bp in length
97 29896: gap of 100 bp
97 42715: contig of 12819 bp in length
116 42815: gap of 100 bp
116 54277: contig of 11462 bp in length
128 54377: gap of 100 bp
129 54377: gap of 100 bp
130 54377: gap of 100 bp
130 54399: contig of 15022 bp in length
                                                   /clone_lib="RPCI-11 Human Male BAC"
                                                                                                     /map="11"
                                                                                                                            /chromosome="11"
                                                                                                                                                      /db_xref="taxon:9606"
                                                                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                                                                                            location/Qualifiers
note="assembly_fragment"
                                                                                clone="RP11-29L13"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3845: gap of 100 bp
9078: contig of 5233 bp in length
9178: gap of 100 bp
1620: contig of 6842 bp in length
                                                                                                                                                                                                                                                      125127: gap of 
184716: conti
                                                                                                                                                                                                                                                                                                     87705: gap of 100 bp
125027: contig of 37322 bp in
                                                                                                                                                                                                                                                                                                                                                      69499: gap of 100 bp
87605: contig of 18106 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16120: gap of 100 bp
21744: contig of 5624 bp in length
                                                                                                                                                                                                                                                 ap of 100 bp
contig of 59589 l
                                                                                                                                                                                                                                                         bp in length
                                                                                                                                                                                                                                                                                                                                                            in
                                                                                                                                                                                                                                                                                                          length
                                                                                                                                                                                                                                                                                                                                                            length
```

```
BASE CO
            REFERENCE
                                                                                                                                                                                             В
                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                            Дb
                                                                                                                                                                                                                                                                  δõ
                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                 QΥ
                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                Ŋ,
                                                                                                                                                                                                                                                                                                                                                                                                                                          DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                 LOCUS
                                                                                                                                              AF292936
                                                                                   KEYWORDS
                                                                                               VERSION
                                                                                                            ACCESSION
                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
 AUTHORS
                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                            158962
                                                                                                                                                                                                                                                                                                                                                                                                                                           159022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       159262 CTGCTGCCTCTTCTGGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       159322 GGTCCAGGCGTCAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCCAGGCTGCGTCTGG
                                                                                                                                                                                             158722
                                                                                                                                                                                                                                                                                           158842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159142 CAACCAATCAGATATATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNT
                                                                                                                                                                                                                                                                                                                   1543
                                                                                                                                                                                                                                                                                                                                                                    1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                caaccaatcagatatatacaaatgaaattagaagaaacacagcctcatgggacagaaatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acccgggaaaggctgccgccaccaccaccaccaccaccaccagcaatggcaacaccgacag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctgctgcctcttctggtcttgcacctgcttctcaaatttttgatgtgagtgccacttcccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   622;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gagcaaaaaaaaaaaaaaaaaaaaaaaa 1693
                                                                                                                                                                                                                                                          ctgcgggcactttggtagactgtgccaccacggcgtgtgttgttgtgaaacgtgaaataaaaa
                                                                                                                                                                                                                                                                                                         cccaaattcaatcagtccatagagacgaacagaatgagaccttccggcccaagcgtggcg
                                                                                                                                                                                                                                                                                                                                                       aagggctcagcctctctgcccacagagtgcccccacgtggaacattctggagctggccat
                                                                                                                                                                                                                                                                                                                                                                                                        acacccggcttggacccactgcaagctgcatcgtgcaacctctttggtgccagtgtgggc
                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGCCTTGCAGATATTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ttgccttgcagatatttaggtacaatggagttttcttttcccaaacgggaagaacacagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGAGGGAGGGAACAAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tgaqggaqgggaacaaagaatactttggggggaaaaaagttttaaaaaagaaattgaaaa
                                                                                                                                                                                             GAGCAAGAAAGAAAAGGAAACAAAATAAGA 158692
                                                                                                                                                                                                                                                                                           CCCAAATTCAATCAGTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCG
                                                                                                                                                                                                                                                                                                                                           AAGGGCTCATCCTCTCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCAT
                                                                                                                                                                                                                                                                                                                                                                                           ACACCCGGCTTGGACCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGC
                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Archosauria; Aves; Neognathae; Galliformes; Phasiani
Phasianinae; Gallus.
                                                                                                          Gallus gallus CEPU-Se alpha 1
AF292936
 Lodge, A.P., McNamee, C.J.,
                                                           Gallus gallus
                                                                        chicken
                                                                                               AF292936.1
                                                                                                                                 AF292936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              52109
           (bases 1 to 1013)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            vector_side:left"
1 39315 c 39009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="assembly_fragment
clone_end:SP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vector_side:left"
125128. .184716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      clone_end:T7
                                                                                                GI:9887386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36.48;
98.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 616.6; DB 2;
Pred. No. 1.4e-145;
0; Mismatches 9;
                                                                                                                                  1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
 Howard, M.R.,
                                                                                                                                 đđ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               53080
                                                                                                                      isoform (CEPU-Se) mRNA, complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               +
                                                                                                                                  mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1203
  Reed, J.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               others
                                    Phasianidae;
  and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                184716;
                                                                                                                                  VRT 24-AUG-2000
                                               Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
  Moss, D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1242
                                                                                                                                                                                                                                                                   1662
                                                                                                                                                                                                                                                                                                                                                                    1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1422
                                                                                                                                                                                                                                                                                                                   1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1182
                                                                                                                                                                                                                                                                                                                                           158843
                                                                                                                                                                                                                                                                                                                                                                                            158903
                                                                                                                                                                                                                                                                                                                                                                                                                                           158963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          159023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          159083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           159143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       159263
                                                                                                                                                                                                                                             158723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL REFERENCE
                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE
                    Qγ
                                             Дb
                                                                   Qy
                                                                                              Вb
                                                                                                                 Qy
                                                                                                                                             멍
                                                                                                                                                                  Qy
                                                                                                                                                                                             맑
                                                                                                                                                                                                                 ρy
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                           Вb
Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                     510
                                                                                                                                                                                                                                                                                                                  330
                                                                                                                                                                                                                                                                                                                                                                  270
                                                                                                                                                                                                                                                                                                                                                                                                                   210
561
                        690
                                               501
                                                                     630
                                                                                              441
                                                                                                                      570
                                                                                                                                             381
                                                                                                                                                                                             321
                                                                                                                                                                                                                   450
                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                   390
                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                           699;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 230
```

```
GCGGCAAGGGGAGAGTGCCACGCTCAGGTGCTCCGTGGACAACCGCGTCACCCGCGTGGC
                                                                                                                                                                                                      taatgaagggaacaatattagcctcacctgcatagccaactggtagaccagagcctacggt
                                                                                                                                                                                                                                                                                                                                                                              cgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGCTGAACCGCAGCATCCTCTATGCCGGCAATGACAAGTGGTGCTTGGACCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccggcagggggggggcccccctcaggtgcactattgacaaccgggtcaccccgggtggc 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 269
GATCACAGGCATCACGAGGGAGCAGTCGGGCGAGTACGAGTGCCAGTGCCTCCAACGACGT
                     aattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgt 749
                                                                                    CACCTGGAGACACATCTCGCCCAAAGCTGTGGGCTTCATCAGCGAGGACGAGTACCTGGA
                                                                                                             CAATGAAGGTGGCAACGTCAGCCTCACCTGCATAGCCACGGGCAGGCCAGACCCCACAAT
                                                                                                                                                                                                                                                                CGTGCACCTCATTGTGCAAGTGTCGCCGAAAATTACCGAGATCTCTTCTGACATCTCCAT
                                                                                                                                                                                                                                                                                                          ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                         GGTGGTGCTCCTGGCCAACACCCAAAACCCCAGTACAGCATCCAGATCCACGACGTGGACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGAGTGCCCGTGCGCAGCGGAGATGCCCACCTTCCCCAAAGCTATGGACAACGTGACTGT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished
2 (bases 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
Submitted (04-AUG-2000) Human Anatomy and Cell Biology, The
University of Liverpool, Ashton Street, Liverpool, Merseyside L69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lodge, A.P. and Moss, D.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein CEPU-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Characterisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /Product="CEPU-Se alpha 1 isoform"
/product="CEPU-Se alpha 1 isoform"
/product="Lag01879.1"
/protein_id="AAG01879.1"
/db_xref="G1:988787"
/translation="MCVGGCLALPWRCLVL/CLRLLFLVPAGVPVRSGDATFPKAMDN
/translation="MCVGGCLALPWRCLVL/CLRLLFLVPAGVPVRSGDATFPKAMDN
/TVRQGESATLRCSVDNRVTRVARLNRSSILYAGNUKWCLDRVVLLANTKTQYSTQI
HDVDYDEGPYTCSVQTDNHPKTSRPHLIVQVSFKITEISSDISINEGRWXLTQIAFT
GRPDPTITWRHISPKAVGFISEDSYLEITGITEDSGSEYECSASNDVAAPVVQRVKVT
VNYPPYISDAKSTGVPVGQKGILWCEASAVPSADFGWYDDKRLAEGQKGLKVENKAF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FSRLTFFNVSEQDYGNYTCVASNQLGNTNASMILYGEQH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="IgLON family protein; secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /gene=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="CEPU-Se"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="brain"
/dev_stage="E18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        db_xref="taxon:903"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  35.7%;
81.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1013)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "CEPU-Se"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of CEPU-Se,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 604.8; Pred. No. 5.5e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              293 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  secreted isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IgLON family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CEPU-1"
                                                                                                                                                                                                                                                                     440
                                                                                                                                                                               500
                                                                                                                                                                                                                                                                                                                 569
                                                                                                                                                                                                                                                                                                                                                           380
                                                                                                                                                                                                                                                                                                                                                                                                        509
                                                                                                                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200
620
                                                                                      560
                                                                                                                                  689
                                                                                                                                                                                                                         629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AP000832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1050 catcatgctatttggt 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      861 GCAGGACTACGGCAACTACACCTGCGTGGCCTCCAACCAGCTAGGAAACAC;AACGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     810 agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              990 acatgactatgggaactacacttgcgtggcctccaacaagctgggccacacccaatgccag 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                750 ggccgcgccgtggtacggaggtaaaggtcaccgtgaactatccaccatacatttcaga 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCGAAGAGCACCGGTGTGCCGGTGGGGGCAGAAGGGCATCCTGATGTGTGAAGCCTCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCCGCGCCTGTCGTCCAGCGAGTCAAAGTCACCGTCAACTACCCACCGTACATCTCGGA 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

(bases 1 to 187203)

Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Homo Sapiens 187,203 genomic DNA of 11q24
Published only in DataBase (1999) In press

2 (bases 1 to 187203)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (03-DEC-1999) Masahira Hattori, The Institute of Physical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APO00832 187203 bp DNA linear HTG 30-MAY Homo sapiens chromosome 11 clone RP11-803P2 map 11q24, WORKING DRAFT SEQUENCE, 27 unordered pieces.
NOTE: This is a 'working draft' sequence. It currently consists of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923,
Fax:81-42-778-9924)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and Chemical Research (RIKEN), Genomic Sciences Center (GSC) Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      On May 31, 2000 this sequence version replaced gi:6997666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Japan (E-mail:hattori@gsc.riken.go.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HTG; HTGS_PHASE1; HTGS_DRAFT.
HOMO sapiens DNA, clone:RP11-803P2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AP000832.2 GI:8118984
                                            Sequencing vector: PCR products; 100% of reads Chemistry: Dye-terminator ET-amersham; 100% of reads Assembly program: Phrap; version 0.990329 Consensus quality: 17113 bases at least Q40 Consensus quality: 17853 bases at least Q30 Consensus quality: 18230 bases at least Q20 Consensus quality: 18203 bases at least Q20 Consensus quality: 18203 bases at least Q20 Consensus Quality coverage: 4.41x in Q20 bases; sum-of-contigs Quality coverage: 4.41x in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                         Center clone name: RP11-803P2
                                                                                                                                                                                                                                                                                                                                                                                            Contact: hattori@gsc.riken.go.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Center code: RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Center: RIKEN Genomic Sciences Center(GSC)
                                                                                                                                                                                                                                                                                                                                                                                                                            Web site:
                                                                                                                                                                                                                                                                                                                                                                                                                      http://hgp.gsc.riken.go.jp/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genome Center
                                                                                                                                                                                                                                                                                                                                         HumDraft11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kanagawa 228-8555,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HTG 30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   740
```

```
27 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    preserved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    as soon as it is available and the accession number will be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          107905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13601
                                                                                                                                                                                                                                                                                                                                                                                                        149382
                                                                                                                                                                                                                                                                                   169655
                                                                                                                                                                                                                                                                                                                                                                            15559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             116465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125659
30966 contig of
54248 contig of
68175 contig of
78752 contig of
78752 contig of
78751 contig of
78751 contig of
1107804 contig of
1107804 contig of
110790 contig of
1125558 contig of
1125757 contig of
1125757 contig of
112577 contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30966
23182
                                                                                                                                                                                                                                                                                                                                            5689
4267
                                                                                                                                                                                                                                                                                                                                                                                                                                  6263
6908
      $\frac{1}{2} \text{$\frac{1}{2} \text{$\frac{1} \text{$\frac{1} \text{$\frac{1} \text{$\frac{1} \text{$\frac{1} \text{$\frac{1}
                                                                                                                                                                                                                    in
                                                                                                                                                                                                                                                                                ä
                                                                                                                                                                                                                                                                                                         in
                                                                                                                                                                                                                                                                                                                                                                                                  'n
                                                                                                                                                                                                                                                                                                                                                                                                                                  in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in
ai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        in
di
di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    length
                                                                                                                                                                                                                    length
                                                                                                                                                                                                                                                   length
                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                     length
                                                                                                                                                                                                                                                                                                                                                                                                                                     length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   length
                                                                                                                                                                                                                                                                                                            length
                                                                                                                                                                                                                                                                                                                                            lengtr
                                                                                                                                                                                                                                                                                                                                                                         length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             length
```

Qy

Sequence updated (25-May-2000).

* NOTE: This is a 'working draft' sequence. It currently consists of 27 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.

186179

180171

1012

length length length length

Length

length

'n

149382 116365 107905 149282 136011 130703 125659 30967 31066: contig of 30966 bp in length 30967 31066: gap of 100 bp 31067 54248: contig of 23182 bp in length 54249 54348: gap of 100 bp 54349 68175: contig of 13827 bp in length 68176 68275: gap of 100 bp 68176 6875: gap of 100 bp 68276 78752: contig of 10477 bp in length 116464: gap of 100 k 125558: contig of 9094 107904: gap of 100 b 116364: contig of 8460 130802: 78852: gap of 100 bp 88975: contig of 10123 bp 89075: gap of 100 bp 98751: contig of 9676 bp 161382: 149381: 142373: 125658: 98851: 11382: gap of 165649: cont 35593: gap of 161282: contig of 155493: cc-142273: contig of 6263 42373: gap of 100 k 149281: contig of 6908 107804: 5658: gap of 100 k .35910: gap of gap of 100 k gap of contig of 6112 contig of 8953 of. 100 bp 5689 100 bp ģ đđ đđ ďď ďď ďď đđ ďď bp in length ďď Ħ 'n in in length Ħ in length in length in length in length length length length length length

```
misc_teature
                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_teature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_teature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          173676 173775: gap of 100 bp 173776 173501 contig of 1726 bp in length 17502 175601: gap of 100 bp 17502 175601: gap of 100 bp 17502 177711: contig of 2110 bp in length 17712 177811: gap of 100 bp 177812 180070: contig of 2259 bp in length 180071 180279: contig of 2259 bp in length 180294 182393: contig of 2123 bp in length 182294 182393: gap of 100 bp 182294 182393: gap of 100 bp in length 183406 183505: gap of 100 bp in length 184404 184793: gap of 100 bp 184594 184793: gap of 100 bp 184594 184793: gap of 100 bp 184794 184793: gap of 100 bp 18679 186178: gap of 100 bp 1 186794 184793: contig of 1285 bp in length 186799 186178: gap of 100 bp 1 186794 184794 184795: contig of 1285 bp in length 186799 186178: gap of 100 bp 1 186799 186178: gap of 100 bp 1 186799 186178: gap of 100 bp 1 186794 184794 184795: contig of 1285 bp in length 186799 186178: gap of 100 bp 1 186799 186178: gap of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               170398 170497: gap of 100 bp
170498 173675: contig of 3178 bp in
173576 173775: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    165650 165749: gap of 100 bp
165750 169554: contig of 3805 bp in length
169555 169654: gap of 100 bp
169655 170397: contig of 743 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="assembly_fragment"
89076. .98751
                                                                                                                                                                     /note="assembly_fragment"
173776. .175501
                                                                                                                                                                                                                                                                                                                                                          /note="assembly_fragment"
165750. 169554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="assembly_fragment"
54349. .68175
                                              /note="assembly_fragment"
177812. .180070
                                                                                                                                                                                                                                   /note="assembly_fragment clone_end:T7
170498. .173675
                                                                                                                                                                                                                                                                                                  /note="assembly_fragment"
169655. .170397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="assembly_fragment"
155594. .161282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="assembly_fragment"
142374. .149281
                                                                                                            /note="assembly_fragment"
175602. .177711
                                                                                                                                                                                                                                                                                                                                                                                                                            161383. .165649
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       149382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 136011. .142273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116465. .125558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="assembly_fragment"
107905. .116364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31067. .54248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:9606"
/chromosome="11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
             /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="assembly_fragment clone_end:SP6 vector_side:left"
130803. .135910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /map="11q24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="RP11-803P2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .30966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .155493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .88975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .107804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   length
                                                                                                                                                                                                                                                                 vector_side:left"
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                     DEFINITION ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                       FOCUS
                                                                                                                                                              ORGANISM
```

Wilson, D.J., Kim, D.S.,

Clarke, G.A.,

Marshall-Clarke, S. and

(bases 1 to 1533)

Eukaryota; Metazoa; Chordata; C Archosauria; Aves; Neognathae; Phasianinae; Gallus.

Chordata; Craniata; Vertebrata; Euteleostomi; Neognathae; Galliformes; Phasianidae;

chicken. Gallus gallus

Y08170.2 GI:4688845 OBCAM protein.

Gallus gallus mRNA for Y08170

1533 bp for OBCAM

protein gamma isoform

linear

VRT 24-APR-1999

```
RESULT 13
FFNINH55A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db 129329 GGTCCAGGCGCCGTCAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGG 129388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 614; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          129929 GAGCCAGCAAGAAAAAGGGAACCAAATAAGA 129959
                                                                                                                                                                                                                                                          129809 CCCAAATTCAATCAGTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCCAGCGTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     129509 CAACCAATCAGATATATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATT 129568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         129449 ACCCGGGAAAGGCTGCCGCCACCACCACCACCACCACCACCAGCAACACAGCAATGGCAACACCGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           129389 CTGCTGCCTCTTCTGGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCC 129448
                                                                                                                                                                                                                                                                                                                                                                                                                                     129689 ACACCCGGCTTGGACCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1123 ctgctgcctcttctggtcttgcacctgcttctcaaattttgatgtgagtgccacttcccc 1182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1243 caaccaatcagatatatacaaatgaaattagaagaaacacagcctcatgggacagaaatt 1302
                                                                                                                           1663 gagcaaaaaaaaaaaaaaaaaaaaaaaa 1693
                                                                                                                                                                                                                                                                                                                                                                     1483 aagggctcagcctctctgcccacagagtgcccccacgtggaacattctggagctggccat 1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1423 acacccggcttggacccactgcaagctgcatcgtgcaacctctttggtgccagtgtgggc 1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                               ctgcgggcactttggtagactgtgccaccacggcgtgtgttgtgaaacgtgaaataaaaa
                                                                                                                                                                                                                                                                                      cccaaattcaatcagtccatagagacgaacagaatgagaccttccggcccaagcgtggcg 1602
                                                                                                                                                                                                                                                                                                                                                 AAGGGCTCAGCCTCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCAT 129808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="assembly_fragment"
182394. .183405
/note="assembly_fragment"
183506. .184693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="assembly_fragment"
184794. .186078
/note="assembly_fragment"
186179. .187203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180171. .182293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          35.7%;
97.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 603.8; DB 2;
Pred. No. 2.6e-142;
0; Mismatches 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 187203;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                    1662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            129688
                                                                                                                                                                          129928
                                                                                                                                                                                                                                                                                                                                                                                                                                        129748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           129508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
MEDLINE
REFERENCE
                     20
                                                          DЬ
                                                                                           Q
                                                                                                                                  밁
                                                                                                                                                                     δÃ
                                                                                                                                                                                                          DЪ
                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                    뫄
                                                                                                                                                                                                                                                                                                                   QY
                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
                       449
                                                          253
                                                                                                                                    193
                                                                                               389
                                                                                                                                                                       329
                                                                                                                                                                                                              133
                                                                                                                                                                                                                                               269
                                                                                                                                                                                                                                                                                                                         209
                                                                                                                                                                                                                                                                                    73
                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
gcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatg
                                                                                                                                                cctggctaaaccgcagcaccatcctctatgctgggaatgaccaagtggtgcctggatcctc
                                                                                                                                                                                                                                                                                                      aaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacgg 268
                                                                                                                                                                                                                                                                                                                                                                                aaatgcacaattotatctottgggcaatcttcacggggctggctggctctgtgtctcttcc 208
                                                      GCGTGGTCATCCTCTCCAACACCAAAACCCCAGTACAGCATCAAGATCCACALOGTGGATG
                                                                                                                              CGTGGTTGAACCGCAGCACCATCCTTTATGCTGGCAATGACAAGTGGTCTATAGACAACC
                                                                                                                                                                                                          TGCGGCAAGGGGAGAGTGCCACGCTCAGGTGTACCGTGGATGACAGGGTGAGGCGGGTAG
                                                                                                                                                                                                                                         tccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtgg 328
                                                                                                                                                                                                                                                                                  CAGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACTG
                                                                                                                                                                                                                                                                                                                                                          AGATGTACCATCCTGCCTGCTGGATCGTCTTCACCGCCACCACTGCCCTGCTCTTCATCC 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (20-APR-1999) D.J. Moss, Liverpool University, Human Anatomy and Cell Biology, Liverpool, L69 3BX, UK On Apr 26, 1999 this sequence version replaced gi:1617043.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
Submitted (21-MAR-1996) D.J.A. Wilson, Liverpool University, Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Moss,D.J.

A family of glycoproteins (GP55), which inhibit neurite outgrowth, are members of the Ig superfamily and are related to OBCAM, neurotrimin, LAMP and CEPU-1
J. Cell. Sci. 109 (Pt 13), 3129-3138 (1996)
97157768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished 3 (bases 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Moss,D.J.
Cloning of CEPU-s,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anatomy and Cell Biology, Revised by [3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wilson, D.J.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cloning of CEPU-s, a secreted isoform of CEPU-1, from chick: structural diversity of IgLON family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lodge, A.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Moss,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 1533)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 1533)
dge,A.P., Kim,D.S., Howard,M.R., McNamee,C.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 1533)
                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TWRHLSGKGQGFVSEDEYLEITGITREQSGEYECSAVNDVAVPDVRKVKVTVNYPPYI
SNAKNTGASVGQKGILQCEASAVPVAEFQWFKEDTRLANGLEGVRIESKGRLSTLTFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /product="OBCAM protein gamma isoform"
/protein_id="CAB41420.1"
/protein_id="CAB41420.1"
/db_xref="GI:468846".1"
/talslation="MYHPACWIVFTATTALLFIPGVPVRSGDATFPKAMDNVTVRQGE
SATLRCTVDDRVRRVAWLNRSTILYAGNDKWSIDNRVVILSNTKTQYSIKIHNVDVYD
EGPYTCSYQTDNHPKTSRVHLIYQVPPQIVNISSDITVNEGSSVTLMCLAFGRPEPTV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NVSEKDYGNYTCVATNKLGNTNASIILYGPGAVHDSGNAASRAAAGLCLWATLLARLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="brain"
/clone_lib="lambda gt10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Gallus gallus"
/db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /dev_stage="embryonic day 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                      33.7%;
72.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C
                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 571.2; DB 5;
Pred. No. 2.1e-134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  455
                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches 283;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  282 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (E18)"
                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and OBCAM cDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Smith, N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1533;
                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                 508
                                                      312
                                                                                                                                                                   388
                                                                                                                                                                                                        192
                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
```

```
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                              DEFINITION ACCESSION
                                                                                                                                                                                                                                                                                                          AF292934
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                       REFERENCE
                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                            Locus
                                                            JOURNAL
PUBMED
                                                                                                         TITLE
                                                                                                                                                                                                ORGANISM
                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                      1033 GGAG
                                                                                                                                                                                                                                                                                                                                                                                                   1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1109
                                                                                                                                                                                                                                                                                                                                                                                                                                 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcagttgcctccaatgacg
                                                                                                                                                                                                                                                                                                                                                                                                   agtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggaggg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aacatgactatgggaactacacttgcgtggcctccaacaagctgggccacaccaatgcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ttaatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        caggctgcgtcttgctgctcttctggtcttgcacctgcttctcaaattttgatgtg 1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCATCATCCTGTACGGGCCCGGAGCGGTGCACGACAGTGGCAATGCAGCCTCCCGGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       aaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGTCCCCGTGGCAGAGTTTCAGTGGTTCAAGGAGGACACCAGGTTAGCAAATGGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGCCAAGAACACAGGCGCCTCAGTGGGCCCAGAAGGGCATCCTGCAGTGCGAGGCCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGCCGTCCCAGATGTCCGGAAAGTCAAAGTCACTGTCAACTACCCGCCGTACATCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATCACGGGCATCACGGGGAGCAGTCGGGGCGAGTATGAGTGCAGTGCTGTCAATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAACGAAGGCAGTGTGACCCTCATGTGCTTTGGCCTTTGGGAGGCCGGAGCCCACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGTCCACCTCATCGTGCAAGTCCCCCCCTCAGATTGTCAACATCTCATCAGACATCACCG 432
                                                                                                                                                                                                                                                                                                                                                                                                                               CCGCTGGCCTCTGCCTCTGGGCCACCCTCCTCGCTCCTCCTCCTCGACTTTTGATAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGGCGTGCGGATCGAGAGCAAGGGCCGCCTCTCGACGCTGACCTTCTTCAATGTGTCGG
                                                                                                                                                                                                                                                            Gallus g
AF292934
Direct Submission Submitted (04-AUG
                                                                     Co-localisation, heterophilic interactions and regulated of IgLON family proteins in the chick nervous system Brain Res. Mol. Brain Res. 82 (1-2), 84-94 (2000)
                            2 (bases 1 to 1556)
Lodge, A.P. and Moss, D.J.
                                                                                                                                                  Archosauria; Aves; Neognathae; Phasianinae; Gallus.
                                                                                                                                                                                                  Gallus gallus
                                                                                                                   Lodge, A.P., Howard, M.R., McNamee, C.J. and Moss, D.J
                                                                                                                                                                                  Eukaryota; Metazoa;
                                                                                                                                                                                                                   chicken
                                                                                                                                                                                                                                                AF292934.1
                                                          1042360
                                                                                                                                                                                                                                                                                                                                                                      1036
                                                                                                                                      (bases 1 to 1556)
                                                                                                                                                                                                                                                                          gallus OBCAM alpha 1 isoform (OBCAM) mRNA,
                                                                                                                                                                                                                                              GI:9887382
                                                                                                                                                                    Chordata; Craniata; Vertebrata; Neognathae; Galliformes; Phasiani
                                                                                                                                                                                                                                                                                            1556
                                                                                                                                                                                                                                                                                         dq
                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                     Phasianidae;
                                                                                                                                                                                                                                                                            complete
                                                                                                                                                                                                                                                                                          VRT
                                                                                                                                                                                  Euteleostomi;
                                                                                                                                                                                                                                                                                          07-NOV-2000
                                                                                                      expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                628
```

JOURNAI

(04-AUG-2000) Human

Anatomy

and

Cell Biology, The

```
Qγ
                                     DЬ
                                                                Qγ
                                                                                                     Дb
                                                                                                                                Ş
                                                                                                                                                                  밁
                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                Βb
                                                                                                                                                                                                                                                              QΥ
                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
     810
                                      637
                                                                     750
                                                                                                     577
                                                                                                                                   690
                                                                                                                                                                                                  630
                                                                                                                                                                                                                                  457
                                                                                                                                                                                                                                                                  570
                                                                                                                                                                                                                                                                                                  397
                                                                                                                                                                                                                                                                                                                              510
                                                                                                                                                                                                                                                                                                                                                               337
                                                                                                                                                                                                                                                                                                                                                                                             450
                                                                                                                                                                                                                                                                                                                                                                                                                               277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             217
                                                                                                                                                                                                                                                                                                                                                                                                                                                             390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 73.3 ies 706; Conservative
agccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagc 869
                                                                                                                      aattcagggcatcacccgggagcagtcagggggactacgagtgcagtgcctccaatgacgt 749
                                 GGCCGTCCCAGATGTCCGGAAAGTCAAAGTCACTGTCAACTACCCGCCGTACATCTCCAA
                                                  ggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcaga
                                                                                                GATCACGGGCATCACGGGGGGGGGGGGGGGGGGGGTATGAGTGCAGTGCTGTCAATGATGT
                                                                                                                                                              GAACGAAGGCAGCAGTGTGACCCTCATGTGCTTGGGCCTTTGGGAAGGCCGGAGCCCACTGT
                                                                                                                                                                                                                                                        taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 629
                                                                                                                                                                                                                                                                                             CGTCCACCTCATCGTGCAAGTCCCCCCCTCAGATTGTCAACATCTCATCAGACATCACCGT
                                                                                                                                                                                                                                                                                                               ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat
                                                                                                                                                                                                                                                                                                                                                           CGTGGTCATCCTCTCCAACACCCAAAACCCAGTACAGCATCAAGATCCACAACGTGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                            cytggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGTTGAACCGCAGCACCATCCTTTATGCTGGCAATGACAAGTGGTCTATAGACAACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ctggctaaaccgcagcaccatcctctatgctgggaatgaccagtggtgcctggatcctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGGCAAGGGGAGAGTGCCACGCTCAGGTGTACCGTGGATGACAGGGTGAGGCGGGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCCAAAGCTATGGACAACGTGACTGT 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             University of Liverpool, Ashton Street, Liverpool, Merseyside 3GE, \ensuremath{\mathsf{UK}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /product="OBCAM alpha 1 isoform"
/protein_id="AAGO1877.1"
/protein_id="AAGO1877.1"
/do_xref="GI:9887383"
/translation="MGVGGCLPLPWRCLVVLCLRLLFLVPAGVPVRSGDATFPKAMDN
/TYROGESATLRCTVDDRVRRVAMLNRSTILYAGNDKWSIDNRVVLLSNTKTQYSIKI
HNDDVDDEGFYTCSVQTDHPKTSRVHLTVQVPDQIVNISSDITWBGSSYTLKCLAF
GRPEFTYTWHLSGKQGGEVSEDEXLETGITYGVPDGSGEYECSAVNDVAVPDVRKKVKVT
VNYPPYISNAKNTGASVGGKGILQCEASAVPVAEFQWFKEDTRLAMGLEGVRIESKGR
LSTLIFFINSSEKDYGNYTCVATNKLGNTNASIILYGPGAVHDSGNAASRAAAGLCLMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TLLARLLLDF "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="IgLON family protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="OBCAM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:9031
/tissue_type="brain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="OBCAM"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /dev_stage="E18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="Gallus gallus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32.6%;
73.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 551.8; DB 5;
Pred. No. 1.8e-129;
0; Mismatches 257;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    293 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1556;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                             689
                                                                                                                                                                                                                                                                                             456
                                                                                                                                                                                                                                                                                                                           569
                                                                                                636
                                696
                                                                                                                                                              576
                                                                                                                                                                                                                             516
                                                                                                                                                                                                                                                                                                                                                                                          509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     216
                                                                                                                                                                                                                                                                                                                                                           396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BTOBCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1057 GAG 1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        697 TGCCAAGAACACAGGCGCCTCAGTGGGCCAGAAGGGCATCCTGCAGTGCGAGGCCTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aggotgogtotggotgotcttotggtottgoacotgottotoaaattttgatgtga 1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      catcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggagggc 1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gtg 1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCTGGCCTCTGGGCCACCCTCCTCGCTCGCCTCCTCCTCGACTTTTGATAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGGACTATGGCAACTACACGTGTGTGGCCACAAACAAGTTGGGCCAACACCAATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acatgactatgggaactacacttgcgtggcctccaacaagctgggccaccacccaatgccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGCGTGCGGATCGAGAGCAAGGGCCCGCCTCTCGACGCTGACCTTCTTCAATGTGTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTCCCCGTGGCAGAGTTTCAGTGGTTCAAGGAGGACACCAGGTTAGCAAATGGGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    agtcccctcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaagaa 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCATCCTGTACGGGCCCGGGAGCGGTGCACGACAGTGGCAATGCAGCCTCCCGGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
Submitted (23-AUG-1988) Schofield P.R
2 (bases 1 to 2593)
Schofield, P.R., McFarland, K.C., Hayflick, J.S., Wilcox, J.N.,
Cho, T.M., Roy, S., Lee, N.M., Loh, H.H. and Seeburg, P.H.
Molecular characterization of a new immunoglobulin superfamily
protein with potential roles in opioid binding and cell contact
EMBO J. 8 (2), 489-495 (1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                X12672
X12672.1 GI:5
cell adhesion 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OBCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bovidae; Bovinae; Bos. 1 (bases 1 to 2593) Schofield, P.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bovine mRNA for opioid binding protein/cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BTOBCAM
                                                                                                                                                                                                                                                                                                                                              kindly reviewed (19-may-1989) by Location/Qualifiers
        /db_xref="Swiss-prot:p11834"
/translation="MGVCGSLEOPWKCLVVVSLRILLFLVPTGVPVRSGDATFPKAMDN
/TVRYGGESATICTIDRVTRVAMLNRSTILYAGNDKWSIDPRVIILVMTPTQYSIMI
QNUDVYDEGPYCSVQTNMFPKTSRVHLIVQVPPQIMNISSDVTVNEGSSVTLLCLAI
QNUDVYDEGPYTGSVQTNMFPKTSRVHLIVQVPPQIMNISSDVTLNDVAAPDVRKVKI
GRPEPTVTWRHLSVKEGQGFVSEDEYLEISDIKRDQSGEYECSALNDVAAPDVRKVKI
TVNYPPYISKAKNTGVSVGQKGILSCEASAVPMAEFQWFKEDTRLATGLIGGMRIENKG
                                                                                                                                /product="put. pre-OPCAM
/protein_id="CAA31192.1"
/db_xref="GI:586"
                                                                                                                                                                                                            /clone="lambda BOM159, lar/tissue_type="brain" /clone_lib="lambda gt10." 785. .1822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein;
HISTLTFFNVSEKDYGNYTCVATNKLGITNASITLYGPGAVIDGVNSASRALACLWLS
                                                                                                                                                                                          /codon_start=1
                                                                                                                                                                                                                                                                                          /db_xref="taxon:9913"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:585
                                                                                                                                                                                                                                                                                                            /organism="Bos taurus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            molecule; glycoprotein; immunoglobulin ein; opioid binding protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chordata; Craniata; Vertebrata; Cetartiodactyla; Ruminantia; Pec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            đđ
                                                                                                                                                                                                                                                                      lambda
                                                                                                                                                                      (AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA
                                                                                                                                                                          <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                    Schofield
                                                                                                                                                                                                                                                                      BOM106"
                                                                                                                                                                          345)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            adhesion
                                                                                                                                                                                                                                                                                                                                                                    P.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pecora;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAM 31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                superfamily;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bovoldea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            756
```

```
BASE COUNT
ORIGIN
                                                                                        QΥ
                                                                                                                             Вb
                                                                                                                                                             QУ
                                                                                                                                                                                                Db
                                                                                                                                                                                                                                  QУ
                                                                                                                                                                                                                                                                      DЬ
                                                                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                                                                           рь
                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                    γ
                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 709; Conserv
                                                                                                                                                                                                                                                                                                                                             1405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1047 cagcatcatgctatttggtccaggcgccgtcagcgaggtgagcaacggcacgtcgaggag 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1165 TGTCCACCTCATCGTGCAGGTCCCTCCCCAGATCATGAACATCTCCTCAGATGTCACCGT 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sig_peptide
                                                                                                                                                                                                1525 GGCAGTGCCCATGGCTGAGTTCCAGTGGTTCAAGGAAGACACCAGGCTGGCCACCGGCCT 1584
                                                                                                                                                                                                                                                                    1465 CAAAGCCAAGAACACAGGGGTCTCCGTTGGCCAGAAGGGCATCTTGAGCTGTGAAGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                1345 GGAAATCTCTGACATCAAACGTGACCAGTCCGGGGAGTATGAGTGCAGCGCCTTGAATGA 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1225 GAATGAGGGGAGCAGCGTGACCCTGCTGTGTCTTGCTATCGGCAGACCAGAGCCAACGGT 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                    687
                                                                                                                                                               927
                                                                                                                                                                                                                                                                                                         807
                                                                                                                                                                                                                                                                                                                                                                             747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            630 tacttggagacacatctctccca---aagcggttggctttgtgagtgaagacgaatactt 686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     510 ggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccat 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     330 ctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcg 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            270 ccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcaccccgggtggc 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               865 AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTTCCCCAAGGCGATGGACAACGTGACGGT 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   210 aggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaacgtgacggt 269
                                                                                                                                                                                                                                                                                        agaagccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtgaagcctc 866
                                                                                                                                                                                                                                                                                                                                                                                                                                       ggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgccagatga 746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ogtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgt 449
                                                    GGACGGCATGAGGATCGAGAACAAAGGCCACATATCCACGCTGACCTTCTTCAACGTCTC 1644
                                                                                                                                              gaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctc
                                                                                                                                                                                                                                agcagtcccctcagcagaattccagtggtacaaggatgacaaagactgattgaaggaaa 926
                                                                                                                                                                                                                                                                                                                                         TGTTGCTGCCCCTGACGTGCGGAAAGTAAAGATCACTGTCAACTACCCCCCCTATATCTC 1464
                                                                                                                                                                                                                                                                                                                                                            cgtggccgcgcgtgfacggagagtaaaggtcaccgtgaactatccaccatacatttc 806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      taatgaagggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggt 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGATCATCCTGGTGAACACGCCAACCCAGTACAGCATCATGATCCAGAACGTGGACGT 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGCTGAACCGCAGCACCATCCTCTACGCCGGGAATGACAAGTGGTCCATAGACCCTCG 1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGGCAGGGGGAGAGCGCCACCCTCAGATGTACCATAGATGATCGGGTCACCCGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="polyA site"
1 769 c 658 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="putative"
866. .1819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="put. OPCAM (AA 1 - 318)"
2593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTLFAHFFIKF"
785. .865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32.2%;
73.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 545.4; DB 4;
Pred. No. 8.6e-128;
0; Mismatches 251;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               635 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 2593;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                             986
                                                                                                                                                                                                                                                                      1524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ۳
```

```
Db 1705 CAGCATCACACTGTATGGGCCTGGAGCCGTCATTGATGGTGTAAACTCGGCCTCTAGAGC 1764
```

Search completed: July 11, 2002, 22:58:22 Job time: 13841 sec

Qy 1107 ggcaggctgcgtctggctgctgcctcttctggtcttgcacctgcttctcaaattttgatg 1166
b 1765 GCTCGCTTGCCTCTGGCTATCAGGGACCCTCTTTGCCCACTTCTTCATCAAGTTTTGATA 1824

Qy 1167 tga 1169

⁰b 1825 AGA 1827

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                   338.6
338.6
337.4
333.8
303.8
308.2
298.2
100
95.2
77.8
65.6
65.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                               340.
340.
340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Issued_Patents_NA:*
1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2,
4: /cgn2_6/ptodata/2,
6: /cgn2_6/ptodata/2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     July 11, 2002, 19:13:11; Search time 102.16 Seconds (without alignments) 2481.341 Million cell updates/sec
      IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        383533 seqs, 122816752 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-700-397-1
1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version 4.5
Copyright (c) 1993 - 2000 Comp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atgaaaaccatccagccaaa....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
/cgn2_6/ptodata/2/ina/5B_COMB.seq:*
/cgn2_6/ptodata/2/ina/6A_COMB.seq:*
/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
/cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/2/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
      DB
                    5229279-5
5512669-5
US-08-472-358-1
PCT-US92-05786A-1
US-08-687-806-1
US-08-809-763-6
                                                                                                                                       US-08-232-463-14

US-08-469-537A-106

US-08-241-943-23

US-08-254-357-1
                                                                                                                                                                                                                                                                                                                     US-08-414-657D-8

US-08-414-657D-10

US-08-414-657D-17

US-08-414-657D-18

US-08-414-657D-11
                                                                                                                                                                                                                      US-08-414-657D-14
US-08-414-657D-15
US-08-414-657D-16
                                                                                                                                                                                                                                                                                US-08-414-657D-12
US-08-414-657D-13
                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-414-657D-9
US-08-414-657D-6
      US-08-956-253-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-414-657D-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-414-657D-1
US-08-414-657D-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-414-657D-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ....tgcacctgcttctcaaattt 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Compugen Ltd
                                                                                                 Patent No. Patent No.
                                                          Sequence
Sequence
                                                                                                                                                         Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Description
                                                                                                                                                                                               Sequence
    Sequence
                                         Sequence
                                                                                                                                           Sequence
                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
1, Appli
1, Appli
1, Appli
6, Appli
6, Appli
                                                                                                                                                       7, Appli
5, Appli
5, Appli
6, Appli
9, Appli
6, Appli
10, Appli
11, Appli
11
                                                                                               1, Appli
. 5229279
. 5512669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-414-657D-7
                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
CITY: I
STATE:
                                                                                                                                                       LENGTH:
```

45	44	43	42	41	40	39	38	37	36	<u>ω</u>	34	ω	32	31	30	29	28
		32.8		33	33	33.2	33.2	33.4	33.6		33.6						
		3.2															
3360	3360	3360	3360	3027	1693	1851	1033	1509	17612	17612	17612	1176	1176	1176	3147	3147	3147
w	Н	_	1	Ν	w	N	N	μ.	4	4	w	4	4	ω	4	4	N
US-08-040-741-5	US-08-714-901-5	US-08-408-420A-5	US-08-408-093-5	US-08-680-326-23	US-09-320-878-23	US-08-414-657D-20	US-08-414-657D-19	US-08-115-052-1	US-09-479-453-29	US-09-479-409-29	US-08-911-853-29	US-09-479-453-34	US-09-479-409-34	US-08-911-853-34	US-09-058-260-7		US-08-781-802-7
Sequence 5, Appli		Sequence 5, Appli	Sequence 5, Appli	Sequence 23, Appl	Sequence 23, Appl	Sequence 20, Appl	Sequence 19, Appl	Sequence 1, Appli	•	`	-		Sequence 34, Appl	34,	Sequence 7, Appli	Sequence 7, Appli	Sequence 7, Appli

Title:

ALIGNMENTS

```
; NAME/KEY: Coding
; LOCATION: 1...924
; OTHER INFORMATION:
US-08-414-657D-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 7, Application US/08414657D
; Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 08543
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Au
APPLICANT: Fischer, Itz
APPLICANT: Zhukareva, V
                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION: NAME: Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                   TYPE: nucleion STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 31-MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM COOOPERATING SYSTEM:
                                                                                     TOPOLOGY: linear
                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pimenta, Aurea
Fischer, Itzhak
Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                  Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Diskette
                                                                                                                                                                                                                                                                                                                                                                                                 31-MAR-1995
                                                                                                     double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Protein and DNA
60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/414,657D
                                                                                                                                                                      7 :
                                                                                                                                                                                                                                                              317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Suite
```

a

```
RESULT 2
US-08-414-657D-1
                                                                                                                                                                       γ
                                                                                                                                                                                                                                         γ
                                                                                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Дb
                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΩV
                 Sequence 1, Application US/08414657D Patent No. 5861283
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 558;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132
                                                                                                                                           876
                                                                                                                                                                                                                                                                                                                                                 699
                                                                                                                                                                                                                                                                                                                                                                                 732
                                                                                                                                                                                                                                                                                                                                                                                                                   639
                                                                                                                                                                                                                                                                                                                                                                                                                                                       672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         552 atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcagtgcctc 611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   159
                                                                                                                                                                                                                                                                                                               792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       45
                                                                                                                                                                                                                             tgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacac 911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tetettecaaggagtgeeegtgegeageggagatgeeacetteeeeaaagetwtggaeaa 131
                                                                                                                                         CAATGCCAGCCTAGTCCTTTTCAGACCTGGGTCGGTGAGAG
                                                                                                                                                                      caatgccagcatcatgctatttggtccaggcgccgtcagcg
                                                                                                                                                                                                         CGTCACTGAGGAGCACTACGGCAACTACACCTGTGTGGCTGCCAACAAGCTGGGGGGTCAC
                                                                                                                                                                                                                                                                             TAGTGCCAATGGCCTTGAGATTAAGAGCACGGAGGGCCAGTCTTCCCTGACGGTGACCAA
                                                                                                                                                                                                                                                                                                           aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaa 851
                                                                                                                                                                                                                                                                                                                                               GGCCTCGGCAGTGCCTGCACCTGACTTGAGTGGTACCGGGATGACACTAG---GATAAA
                                                                                                                                                                                                                                                                                                                                                                   agcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaagactgattga 791
                                                                                                                                                                                                                                                                                                                                                                                                                   TATCACAGAATCCAAGAGCAATGAAGCCACCACAGGACGACAAGCTTCACTCAAATGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                       catttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAACGAGGTCTCCTCGGCGGATGTCAAACAAGTCAAGGTCACTGTGAACTATCCTCCCAC 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccata 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCTGTTATCACCTGGAGACACCTTACACCAACTGGAAGGGAATTTGAAGGAGAAGAAGA 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCACTGTGAATGAGGGCAGCAACGTGACTCTGGTCTGCATGGCCAATGGCCGTCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tatotocattaatgaagggaacaatattagootoacotgcatagcaactggtagacoaga 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACCTCCCAAGTTTACTTGATCGTACAAGTCCCACCAAAGATCTCCAATATCTCCTCGGA 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gacctctagggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcaga 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGGATGTCTATGATGAGGGGTTCCTACACTTGCTCAGTTCAGACACAGCATGAGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGACCCACGGGTTGAGCTGGAGAAACGCCATTCTCTGGAATACAGCCTCCGAATCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaa 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGGTGGCCTGGTTGAACCGTTCTGGCATCATTTTTGCTGGACATGACAAGTGGTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccgggtggcctggctaaaccgcagcaccatcctctatgctggggaatgacaagtggtgcct 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCACCGTGAGGCAGGGGGACACAGCCATCCTCAGGTGCGTTCTAGAAGACAAGAACTC 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTTCCCACAGGACTGCCTGTTCGCAGCGTGGAT-----TTTAACCGAGGCACGACAA 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATCTGGAGATCCTTGGCATCACCAGGGAGCAGTCAGGCAAATATGAGTGCAAAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
     Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        33.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 340.6; DB 2;
Pred. No. 1.2e-93;
0; Mismatches 314;
                                                                                                                                                                         952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          924;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                         875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         458
                                                                                                                                                                                                                                                                           815
                                                                                                                                                                                                                                                                                                                                               755
                                                                                                                                                                                                                                                                                                                                                                                                                   869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
 밁
                              Qγ
                                                                  DЬ
                                                                                              Qy
                                                                                                                                    D
                                                                                                                                                                    QУ
                                                                                                                                                                                                       B
                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                            βb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-414-657D-1
                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                   Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 977 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
 340
                                                                  280
                                                                                                                                     220
                                                                                                                                                                      252
                                                                                                                                                                                                       160
                                                                                                                                                                                                                                         192
                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                             132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                             46
                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 31 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Dechert Price & Rhoads STREET: 997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                               72 tctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                     gacctctagggtccacctcattgtgcaagtatctcccaaaaattgtagagatttcttcaga
GACCTCCCAAGTTTACTTGATCGTACAAGTCCCACCAAAGATCTCCAATATCTCCTCGGA
                                                                                           GGACCCACGGGTTGAGCTGGAGAAACGCCATTCTCTGGAATACAGCCTCCGAATCCAGAA
                                                                                                                                                                                                      AAAGGTGGCCTGGTTGAACCGTTCTGGCATCATTTTTGCTGGACATGACAAGTGGTCTCT
                                                                                                                                                                                                                                                                         CATCACCGTGAGGCAGGGGGACACAGCCATCCTCAGGTGCGTTCTAGAAGACAAGAACTC
                                                                                                                                                                                                                                                                                          cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac
                                                                  GGTGGATGTCTATGATGAGGGTTCCTACACTTGCTCAGTTCAGACACAGCATGAGCCCAA
                                                                                                                                                                ggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcatcgagatccagaa
                                                                                                                                                                                                                         ccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcct
                                                                                                                                                                                                                                                                                                                                             TCTTCCCACAGGACTGCCTGTTCGCAGCGTGGAT----TTTAACCGAGGCACGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                              similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pimenta, Aurea
Fischer, Itzhak
Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Coding Sequence 2...976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     double
                                                                                                                                                                                                                                                                                                                                                                                                                               33.0%;
63.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           317743-102
                                                                                                                                                                                                                                                                                                                                                                                                            Score 340.6; DB 2;
Pred. No. 1.2e-93;
0; Mismatches 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      210
                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
```

977; 9;

Gaps

2;

99

131

219

159 191

251

```
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-414-657D-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 5, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building 3,
                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        732 agcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattga 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               640 TATCACAGAATCCAAGAGCAATGAAGCCACCACAGGACGACAAGCTTCACTCAAATGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         580 CAACGAGGTCTCCTCGGCGGATGTCAAACAAGTCAAGGTCACTGTGAACTATCCTCCCAC 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             817 CGTCACTGAGGAGCACTACGGCAACTACACCTGTGTGGCTGCCAACAAGCT@GGGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                460 ACCTGTTATCACCTGGAGACACCTTACACCAACTGGAAGGGAATTTGAAGGAGAAGAAGA 519
                                                                        FILING DATE:
                                                                                          APPLICATION NUMBER:
                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                           OPERATING SYSTEM:
SOFTWARE: FastSEQ
                                                                                                                                                                                                                                                   COMPUTER:
                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                              STREET: 997 Lenox Di
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tatotocattaatgaagggaacaatattagcotoacotgcatagcaactggtagaccaga 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 catttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtggaactatccaccata 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTGGAGATCCTTGGCATCACCAGGGAGCAGTCAGGCAAATATGAGTGCAAAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atacttggaaattcagggcatcaccgggagcagtcaggggactacgagtgcagtgcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCACTGTGAATGAGGGCAGCAACGTGACTCTGGTCTGCATGGCCAATGGCCGTCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAATGCCAGCCTAGTCCTTTTCAGACCTGGGTCGGTGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   caatgccagcatcatgctatttggtccaggcgccgtcagcg 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAGTGCCAATGGCCTTGAGATTAAGAGCACGGAGGGCCAGTCTTCCCTGACGGTGACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCCTCGGCAGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACACTAG---GATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08543
                                                                                                                                                                                                                                                                                                                                              Ŋ
                                                                                                                                                                                                       SYSTEM: DOS
FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Levitt, Pat
                                                                                                                                                                                                                                               IBM Compatible
                                                                                                                                                 31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                     US/08/414,657D
  317743-102
                                                                                                                                                                                                                                                                                                                                                                                      Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             459
```

```
Ωy
                                       DЪ
                                                                                                              밁
                                                                                                                                              Qγ
                                                                                                                                                                                    밁
                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                            맔
                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q_{\lambda}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-414-657D-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 1014 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                           432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              132 cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgaccaaccgggtcac 19:
                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180 GAAAGTGGCCTGGTTGAACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCT
                                       720
                                                                                                                                                                                    540 ATATCTGGAGATCCTAGGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72 totottccaaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaa 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 1...101
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 1014 base pai
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
                                                                                                                               catttcagaagccaagggtacaggtgtccccgtgggacaaaaggggacactgcagtgtga 731
                                                                                                                                                                                                                                                                             atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctc 611
                                                                                                                                                                                                                                                                                                                                                   tatotocattaatgaagggaacaatattagcotoacotgcatagcaactggtagaccaga 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gacetetagggteeaceteattgtgeaagtateteeeaaaattgtagagatttetteaga 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTGGATGTCTATGATGAAGGATCCTACACATGCTCAGTTCAGACACAGCATGAGCCCCAA 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ggatcotcgogtggtcottctgagcaacacccaaacgcagtacagcatcgagatccagaa 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccgggtggcctggctaaaccgcagcaccatcctctatgctggggaatgacaagtggtgcct 251
                                                        agcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattga 791
                                                                                                                CATCACAGAGTCTAAGAGCAATGAAGCCACCACAGGACGACAAGCTTCCCTCAAATGTGA 719
                                                                                                                                                                                                                caatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaactatccaccata
                                                                                                                                                                                                                                                                                                                                                                                                     TGTCACTGTGAATGAGGGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCGCCCCTGA 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACCTCTCAAGTTTACTTGATTGTACAAGTTCCACCAAAGATCTCCAACATCTCCTCGGA 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGACCCTCGGGTTGAGCTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAA 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCACCGTGAGGCAGGGGGACACGGCCATCCTCAGGTGTGTGGTAGAAGACAAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTTCCCACAGGACTGCCCGTTCGCAGCGTGGAT-----TTTAACCGAGGCACGGACAA 119
aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaa 851
                                                                                                                                                                                                                                                                                                                                ACCTGTTATCACCTGGAGACACCTTACACCACTTGGAAGAATTTGAAGGAGAAGAAGA
                                       AGCCTCAGCGGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACACCAG----GATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      595;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Coding Sequence 1...1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       33.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 340.6; DB 2
Pred. No. 1.2e-93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1014;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
```

179

ω

B

777 CAGTGCAAACGGCCTTGAGATTAAGAGCACTGAGGGCCAGTCCTCCCTGACGGTGACCAA

776

659

599

```
US-08-414-657D-3; Sequence 3, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                    US-08-414-657D-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                    Best Local Si
Matches 595;
                                  Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1014 T 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Limbic System-A
                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1032 t 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        837 CGTCACTGAGGAACACTACGGCAACTATACCTGTGTGGCTGCCAACAAGCTCGGCGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      954 CAGTCTGGCCGTACCACTGTGGCTGCTGGCAGCGTCCCTGTTCTGCCTTCTCAGCAAATG 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         852
                                                                                                                  NAME/KEY: Coding LOCATION: 56...10 OTHER INFORMATION:
                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                  NAME: Bloom, Allen REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 31-MAF
                                                                                                                                                                                 STRANDEDNESS: don TOPOLOGY: linear
                                                                                                                                                                                                                    TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                  LENGTH: 1238 base pairs
                                                                                                                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gaggagggcaggctgcgtctgctgctgctcttctggtcttgcacctgcttctcaaatt 1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           caatgccagcatcatgctatttggtccagggcgccgtcagcgaggtgagcaacggcacgtc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAATGCCAGCCTAGTCCTTTTCAGACCCGGGTCGGTGAG---AGGAATCAACGGATCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      , Application US/08414657D 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08543
                                Similarity
                                                                                                                                                                                                               nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Z
                                                                                                                                                                                                                                                                                                    609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zhukareva, Victoria
VENTION: Limbic System-Associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pimenta, Aurea
Fischer, Itzhak
                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Levitt, Pat
                                                                                                                                     Coding Sequence 56...1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAR-1995
                                                                                                                                                                                                 double
                               33.0%;
61.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/414,657D
                 Score 340.6;
Pred. No. 1.3e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                    317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ω
                 1.3e-93;
ches 354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Membrane
                                                Length 1238;
                   Indels
                   12;
                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Вb
                                                                                                                              Qγ
                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                              2
                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                 δ
Š
                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                           US-08-414-657D-9
                                                                                               g
                                                                                                                                                                DЪ
                                                                                                                                                                                                                                                                                                  Дb
                                              RESULT
Sequence 9, Application US/08414657D Patent No. 5861283
                                                                                               1069
                                                                                                                              1032 t 1032
                                                                                                                                                              1009 CAGTCTGGCCGTACCACTGTGGCTGCCTGGCAGCGTCCCTGTTCTGCCTTCTCAGCAAATG 1068
                                                                                                                                                                                                                                952
                                                                                                                                                                                                                                                                                                  892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   175 CATCACCGTGAGGCAGGGGGACACGGCCATCCTCAGGTGTGGTGGTAGAAGACACAGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     132
                                                                                                                                                                                        972 gaggagggcaggctgcgtctggctgctgctcttctggtcttgcacctgcttctcaaatt 1031
                                                                                                                                                                                                                                                                 912
                                                                                                                                                                                                                                                                                                                               852
                                                                                                                                                                                                                                                                                                                                                                832
                                                                                                                                                                                                                                                                                                                                                                                                 792
                                                                                                                                                                                                                                                                                                                                                                                                                                  775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        432 tatctccattaatgaagggaacaatattagcctcacctgcatagcaactggtagaccaga 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 TCTTCCCACAGGACTGCCCGTTCGCAGCGTGGAT-----TTTAACCGAGGCACGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tetettecaaggagtgeeegtgegeageggagatgeeaeetteeeeaaagetatggaeaa 131
                                                                                               T 1069
                                                                                                                                                                                                                                                   tgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacac 911
                                                                                                                                                                                                                                                                                                                                                                                                                                                     agcotcagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      catttcagaagccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  caatgacgtggccgcgccgtggtacggagagtaaaggtcaccgtgaactatccaccata 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      atacttggaaattcagggcatcaccgggagcagtcaggggactacgagtgcagtgcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gacctctagggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcaga 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGGATGTCTATGATGAAGGATCCTACACATGCTCAGTTCAGACACAGCATGAGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACCCTCGGGTTGAGCTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAA 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac
                                                                                                                                                                                                                                CAATGCCAGCCTAGTCCTTTTCAGACCCGGGTCGGTGAG---AGGAATCAACGGATCCAT 1008
                                                                                                                                                                                                                                                                                              CGTCACTGAGGAACACTACGGCAACTATACCTGTGTGGCTGCCAACAAGCTCGGCGTCAC
                                                                                                                                                                                                                                                                                                                                                              CAGTGCAAACGGCCTTGAGATTAAGAGCACTGAGGGCCAGTCCTCCCTGACGGTGACCAA 891
                                                                                                                                                                                                                                                                                                                                                                                            aggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaa 851
                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCTCAGCGGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACACCAG----GATAAA 831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCACAGAGTCTAAGAGCAATGAAGCCACCACAGGACGACAAGCTTCCCTCAAATGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTGGAGATCCTAGGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTGTTATCACCTGGAGACACCTTACACCACTTGGAAGAATTTGAAGGAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTCACTGTGAATGAGGGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCGCCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACCTCTCAAGTTTACTTGATTGTACAAGTTCCACCAAAGATCTCCAACATCTCCTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ggatcetegegtggteettetgageaacaceceaaacgeagtacageategagatecagaa 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAAGTGGCCTGGTTGAACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        174
```

791 774 731 714 594 551 534 371

294

234

```
Вþ
                                                            Qγ
                                                                                                 В
                                                                                                                                δõ
                                                                                                                                                                 밁
                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-414-657D-9
                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity Matches 531; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 861 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Limbic System-A-TITLE OF INVENTION: Protein and DNA NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
 420
                                    264
                                                                                                                                300
                                                                                                                                                                 144
                                                                                                                                                                                                240
                                                                                                 204
                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                     84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 1...861
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 31-MAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                   24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                              caaccacccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtaga 419
                                                                                                                                                                 CAAGTGGTCTCTGGACCCACGGGTTGAGCTGGAGAAACGCCATTCTCTGGAATACAGCCT
                                                                                                                                                                                                                                                      caaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatga
                                                                                                                                                                                                                                                                                                                      agctatggacaacgtgacggtccggcagggggagagcgccaccctcaggtgcactattga 179
gatttcttcagatatctccattaatgaagggaacaatattagcctcacctgcatagcaac 479
                                GCATGAGCCCAAGACCTCCCAAGTTTACTTGATCGTACAAGTCCCCACCAAAGATCTCCAA
                                                                                                                      caagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcat
                                                                                                                                                                                                                                   AGACAAGAACTCAAAGGTGGCCTGGTTGAACCGTTCTGGCATCATTTTTGCTGGACATGA 143
                                                                                                                                                                                                                                                                                                   AGGCACGGACAACATCACCGTGAGGCAGGGGGACACAGCCATCCTCAGGTGCGTTCTAGA
                                                                                                 CCGAATCCAGAAGGTGGATGTCTATGATGAGGGGTTCCTACACTTGCTCAGTTCAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    double
                                                                                                                                                                                                                                                                                                                                                                                     32.8%;
63.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9:
                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317743-102
                                                                                                                                                                                                                                                                                                                                                                  Score 338.6; DB 2
Pred. No. 4.5e-93;
0; Mismatches 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3, Suite
                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                                                                                                                                     299;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       210
                                                                                                                                                                                                                                                                                                                                                                                                  Length 861;
                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                   ω
                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                323
                                                                                                                                359
                                                                                                                                                                 203
                                                                                                                                                                                                                                                                  239
                                                                                                                                                                                                                                                                                                   83
                                                                                                 263
                                                                                                                                                                                                  299
                                                                                                                                                                                                                                                                                                                                                                   ۳.
```

```
RESULT 6
US-08-414-657D-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                 ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
REGISTRATION NUMBER: 29,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900 gctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540 gagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        324 TATCTCCTCGGATGTCACTGTGAATGAGGGCAGCAACGTGACTCTGGTCTGCATGGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     741 GACGGTGACCAACGTCACTGAGGAGCACTACGGCAACTACACCTGTGTGGCTGCCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                564 CTATCCTCCCACTATCACAGAATCCAAGAGCAATGAAGCCACCACAGGACGACAAGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         504 GTGCAAAGCTGCCAACGAGGTCTCCTCGGCGGATGTCAAACAAGTCAAGGTCACTGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  444 AGGAGAAGAAGAATATCTGGAGATCCTTGGCATCACCAGGGAGCAGTCAGGCAAATATGA
                                                                                                                                                                                                                                                                                                                                                                               STREET: 99/ Decille
                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 31-MAR
                                                                                                                                                                                                                                                              COMPUTER: IBM COR
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                             ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Decner rive, Building STREET: 997 Lenox Drive, Building
                                                                                                              FILING DATE:
                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                              SOFTWARE:
                                                                                                                                                                                                                                                                                                      MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       catcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaa 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aagactgattgaaggaaagaaggggtgaaagtggaaaacagacctttcctctcaaaact 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           actgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaa 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgt 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAG---GATAAATAGTGCCAATGGCCTTGAGATTAAGAGCACGGAGGGCCAGTCTTCCCT 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCAAATGTGAGGCCTCGGCAGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGCCGTCCTGAACCTGTTATCACCTGGAGACACCTTACACCAACTGGAAGGGAATTTGA 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGGGGTCACCAATGCCAGCCTAGTCCTTTTCAGACCTGGGTCGGTGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          =
=
=
=
=
                                                                                                                                                                                                                                                                                                                                             08543
                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pimenta, Aurea
Fischer, Itzhak
Zhukareva, Victoria
                                                                                                                                                                                                                                              FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Levitt, Pat
                                                                                                                                                                                                                                                                              IBM Compatible
                                                                                                                                                                                                                                                                                                      Diskette
                                                                                                                                                                                     31-MAR-1995
                                                                                                                                                                                                                                                                Sod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                           US/08/414,657D
                                                   29,135
                                     317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                    3, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                      210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          383
```

B

801 GCTGGGGGTCACCAATGCCAGCCTAGTCCTTTTCAGACCTGGGTCGGTGAGAG 853

```
Ş
                                                     B
                                                                                    8
                                                                                                                      B
                                                                                                                                                      Qy
                                                                                                                                                                                          Д
                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                          Вþ
                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                                                                                                 Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Βb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-414-657D-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                   900
                                                                                                                                                                                          624
                                                                                                                                                                                                                                                            564
                                                                                                                                                                                                                                                                            660 ctatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggac
                                                                                                                                                                                                                                                                                                                             504
                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  324 TATCTCCTCGGATGTCACTGTGAATGAGGGCAGCAACGTGACTCTGGTCTGCATGGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420 gatttetteagatateteeattaatgaagggaacaatattageeteacetgeatageaac 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120 agctatggacaacgtgacggtccggcagggggagagcgcccccctcaggtgcactattga 179
                                                                                                                                                  780 aagactgattgaaggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaact
                                                                                                                                                                                                                     720 actgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaag atgacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Coding LOCATION: 1...912 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX:
TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24 AGGCACGGACATCACCGTGAGGCAGGGGGACACACCCTCAGGTGC%TTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84 AGACAAGAACTCAAAGGTGGCCTGGTTGAACCGTTCTGGCATCATTTTTGCTGGACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 912 base pairs
gctgggccacaccaatgccagcatcatgctatttggtccagggcgccgtcagcg 952
                                                   GACGGTGACCAACGTCACTGAGGAGCACTACGGCAACTACACCTGTGTGGCTGCCCAACAA
                                                                         catettetteaatgtetetgaacatgaetatgggaactaeaettgegtggeeteeaacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  caaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatga 239
                                                                                                                                                                                                                                                                                                                           GTGCAAAGCTGCCAACGAGGTCTCCTCGGCGGATGTCAAACAAGTCAAGGTCACTGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                   gagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         caaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGAATCCAGAAGGTGGATGTCTATGATGAGGGTTCCTACACTTGCTCAGTTCAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          caagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcat
                                                                                                                                                                                        ACTCAAATGTGAGGCCTCGGCAGTGCCTGCACCTTTGAGTGGTACCGGGATGACAC
                                                                                                                                                                                                                                                          CTATICCTCCCACTATICACAGAATCCAAGAGCAATGAAGCCACCACAGGACGA; AAGCTTC
                                                                                                                                                                                                                                                                                                                                                           gtgcagtgcctccaatgacgtggccgcgcccgtggtacggagagtaaaggtcaccgtgaa
                                                                                                                                                                                                                                                                                                                                                                                                 AGGAGAAGAAGAATATCTGGAGATCCTTGGCATCACCAGGGAGCAGTCAGGCAAATATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGCCGTCCTGAACCTGTTATCACCTGGAGACACCTTACACCAACTGGAAGGGAATTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgt 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCATGAGCCCAAGACCTCCCAAGTTTACTTGATCGTACAAGTCCCACCAAAGATCTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGTGGTCTCTGGACCCACGGGTTGAGCTGGAGAAACGCCATTCTCTGGAATACAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   531;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic acid
                                                                                                                      ---GATAAATAGTGCCAATGGCCTTGAGATTAAGAGCACGGAGGGCCAGTCTTCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Coding Sequence 1...912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 32.8%;
63.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 338.6; DB 2
Pred. No. 4.6e-93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   299; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 443
                                                                                                                      740
                                                                                                                                                                                                                                                                                         719
                                                                                                                                                                                                                                                                                                                             563
                                                                                                                                                                                                                                                                                                                                                                                               503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83
                                                                                                                                                                                                                                                          623
                                                                                                                                                                                                                                                                                                                                                             659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,,</u>
```

```
QΥ
                                                                                                                                            QY
                                                  밁
                                                                             δÃ
                                                                                                               밁
                                                                                                                                                                             망
                                                                                                                                                                                                          Ωy
                                                                                                                                                                                                                                                                                                                        ; LOCATION: 1...945; OTHER INFORMATION: US-08-414-657D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-414-657D-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                            Best Local Similarity Matches 556; Conserv
                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Limbic System-Associated TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                  252
                                                  180
                                                                192 ccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatgacaagtggtgcct 251
                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: N
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 99, L. CTTY: Lawrenceville
                                                                                                                                                                                                72 tctcttccaaggagtgcccgtgcgcagcggagatgccaccttccccaaagctatggacaa 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 31-MAR
                                                                                                                                                                               66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Bloom, Allen REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
 ggatectegegtggtecttetgagcaacacceaaaegcagtacagcategagatecagaa
                                                GAAAGTGGCCTGGTTGAACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCT
                                                                                                                                cgtgacggtccggcagggggagagcgccaccctcaggtgcactattgacaaccgggtcac 191
                                                                                                               CATCACCGTGAGGCAGGGGGACACGGCCATCCTCAGGTGTGGTAGAAGACAAGAACTC
                                                                                                                                                                             TCTTCCCACAGGACTGCCCGTTCGCAGCGTGGAT-----TTTAACCGAGGCACGGACAA 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08543
                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                     945 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Levitt, Pat
                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                         Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dechert Price & Rhoads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UMBER: US/08/414,657D
31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                      double
                                                                                                                                                                                                                                                         32.7%;
63.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                            0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317743-102
                                                                                                                                                                                                                                          Score 337.4; DB 2;
Pred. No. 1.1e-92;
0; Mismatches 316;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Suite
210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Membrane
                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                            9;
                                                                                                                                                                                                                                            Gaps
                311
                                                                                                               179
                                                  239
```

2;

```
RESULT 8
US-08-414-657D-10
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10, Patent No. 58
                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                            OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Limbic System-A
                                                                                                                                                                                                                                                                                              APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated
                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                            STREET:
CITY: L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420 TGTCACTGTGAATGAGGGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCGCCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312
                                                                  COMPUTER: IBM CO
OPERATING SYSTEM:
                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                           STATE:
             APPLICATION NUMBER:
                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          caatgccagcatcatgctatttggtccaggcgccgtcagcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tatctccattaatgaagggaacaatattagcctcacctgcatagcaactggtagaccaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAATGCCAGCCTAGTCCTTTTCAGACCCGGGTCGGTGAGAG 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   catttcagaagccaagggtacaggtgtccccgtgggacaaaagggggacactgcagtgtga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caatgacgtggccgcgcgtggtacggagagtaaaggtcaccgtgaactatccaccata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               atacttggaaattcagggcatcacccgggagcagtcaggggactacgagtgcagtgcctc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACCTCTCAAGTTTACTTGATTGTACAAGTTCCCACCAAAGATCTCCAACATCTCCTCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gacctctagggtccacctcattgtgcaagtatctcccaaaattgtagagatttcttcaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGGATGTCTATGATGAAGGATCCTACACATGCTCAGTTCAGACACAGCATGAGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTCACTGAGGAACACTACGGCAACTATACCTGTGTGGCCTGCCAACAAGCTCGGCGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tgtctctgaacatgactatgggaactacacttgcgtggcctccaacaagctgggccacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGTGCAAACGGCCTTGAGATTAAGAGCACTGAGGGCCAGTCCTCCCTGACGGTGACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aggaaagaaaggggtgaaagtggaaaacagacctttcctctcaaaactcatcttcttcaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTCAGCGGTGCCTGCACCTGACTTTGAGTGGTACCGGGGATGACACCAG---GATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agcctcagcagtcccctcagcagaattccagtggtacaaggatgacaaaagactgattga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCACAGAGTCTAAGAGCAATGAAGCCACCACAGGACGACAAGCTTCCCTCAAATGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATATCTGGAGATCCTAGGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCTGTTATCACCTGGAGACACCTTACACCACTTGGAAGAGAATTTGAAGGAGAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGACCCTCGGGTTGAGCTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAA
                                                                                                                                         08543
                                                                                                                                                                                                                                                                                                                                                                                                                 5861283
                                                                                                                                                                                          Lawrenceville
                                                                                                                                                                           Z
                                                                                                                                                                                                                                                                                                                                                                                                                               Application
                                                                                                                                                                                                           E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                            Levitt, Pat
                                                                               IBM Compatible
                                                                                                     Diskette
                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08414657D
         US/08/414,657D
                                                                                                                                                                                                           ω
,
                                                                                                                                                                                                           Suite
                                                                                                                                                                                                           210
                                                                                                                                                                                                                                                                                                    Membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         299
                                                                           В
                                                                                                           ρy
                                                                                                                                                   B
                                                                                                                                                                                   δδ
                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                            Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-414-657D-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 528;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 31-MAR-CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 861 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
REGISTRATION NUMBER: 29,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
     624
                                                                           564
                                                                                                                                                   504
                                                                                                                                                                                   600
                                                                                                                                                                                                                       444
                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                  480
                    720 actgcagtgtgaagcctcagcagtcccctcagcagaattccagtggtacaaggatgacaa 779
                                                                                                                                                                                                                                                                                              384
                                                                                                                                                                                                                                                                                                                                                                  324 CATCTCCTCGGATGTCACTGTGAATGAGGGCAGCAATGTAACCCTGGTCTGCATGGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                          264 GCATGAGCCCAAGACCTCTCAAGTTTACTTGATTGTACAAGTTCCACCAAAGATCTCCAA 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120 agctatggacaacgtgacggtccggcagggggagagcgcccccctcaggtgcactattga 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 1...861
OTHER INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX:
CCTCAAATGTGAAGCCTCAGCGGTGCCTGCACCTGACTTTGAGTGGTACCGGGATGACAC
                                                                                                ctatccaccatacatttcagaagccaagggtacaggtgtccccgtgggacaaaaggggac
                                                                                                                                               GTGCAAGGCTGCCAACGAGGTCTCCTCCGCGGATGTCAAACAAGTCAAGGTCACTGTGAA
                                                                                                                                                                       gtgcagtgcctccaatgacgtggccgcgcgcgtggtacggagagtaaaggtcaccgtgaa
                                                                                                                                                                                                                     AGGAGAAGAATATCTGGAGATCCTAGGCATCACCAGGGAACAGTCAGGCAAATATGA
                                                                                                                                                                                                                                        gagtgaagacgaatacttggaaattcagggcatcacccgggagcagtcaggggactacga 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                           caaccaccaaagacctctagggtccacctcattgtgcaagtatctcccaaaattgtaga 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGAATCCAGAAGGTGGATGTCTATGATGAAGGATCCTACACATGCTCAGTTCAGACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGTGGTCTCTGGACCCTCGGGTTGAGCTGGAGAAACGCCATGCTCTGGAATACAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            caagtggtgcctggatcctcgcgtggtccttctgagcaacacccaaacgcagtacagcat 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGACAAGAACTCGAAAAGTGGCCTGGTTGAACCGCTCTGGCATCATCTTCGCTGGACACGA 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  caaccgggtcacccgggtggcctggctaaaccgcagcaccatcctctatgctgggaatga
                                                                         CTATCCACCCACCATCACAGAGTCTAAGAGCAATGAAGCCACCACAGGACGACAAGCTTC
                                                                                                                                                                                                                                                                                           TGGGCGCCCTGAACCTGTTATCACCTGGAGACACCTTACACCACTTGGAAGAGAATTTGA
                                                                                                                                                                                                                                                                                                                 tggtagaccagagcctacggttacttggagacacatctctcccaaagcggttggctttgt 539
                                                                                                                                                                                                                                                                                                                                                                                         gatttetteagatateteeattaatgaagggaacaatattageeteaeetgeatageaae 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGCACGGACAACATCACCGTGAGGCAGGGGGACACGGCCATCCTCAGGTGTGTGGTAGA 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          861 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Coding
1...861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 333.8; DB 2;
Pred. No. 1.3e-91;
0; Mismatches 302;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          317743-102
```

Indels Length

w •• Gaps

٠.

683

719

563 659 503

623

443

383

359

203

239

263

Db 20 В 20 밁 Ωy 망 Qγ g QΥ B Qy 밁 24 D Q B 20 В γ 밁 δõ Дb

```
B
                                 Ş
                                                                                                                                                  US-08-414-657D-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-414-657D-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          몽
                                                               Query Match
Best Local Similarity
Matches 481; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17, Apprix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL
                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOPTWARE: FASTEM: DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER
                                                                                                                                                                                                                                                                                                                                                       NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                   148
                                                                                                                                                                                               FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Limbic System-Associated Membrane TITLE OF INVENTION: Protein and DNA NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: |
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
CITY: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840 catcttcttcaatgtctctgaacatgactatgggaactacacttgcgtggcctccaacaa 899
                                                                                                                                                                 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM CONTROL OPERATING SYSTEM: SOFTWARE: FastSE(
                                                                                                                                                                                LOCATION:
                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 31-MAI
1 GGGGACACAGCCATCCTCAGGTGCGTTCTAGAAGACAAAGAACTCAAAGGTGGCCTGGTTG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                           LENGTH:
                    ggggagagegecacecteaggtgeactattgacaacegggtcacecgggtggc©ttggeta 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTCGGCGTCACCAATGCCAGCCTAGTCCTTTTCAGACCCGGGTCGGTGAGAG 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAG----GATAAACAGTGCAAACGGCCTTGAGATTAAGAGCACTGAGGGCCAGTCCTCCCT 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                aagactgattgaaggaaagaaggggtgaaaagtggaaaaacagacctttcctccaaaact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gctgggccacaccaatgccagcatcatgctatttggtccaggcgccgtcagcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACGGTGACCAACGTCACTGAGGAACACTACGGCAACTATACCTGTGTGGCTGCCAACAA 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08414657D
                                                                                                                                                                                                                                                                           756 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: Dechert Price & Rhoads
997 Lenox Drive, Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pimenta, Aurea
Fischer, Itzhak
Zhukareva, Victoria
                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                           609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Levitt, Pat
                                                                                                                                                                               Coding Sequence 1...756
                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAR-1995
                                                                               29.4%;
                                                                                                                                                                                                                                                                                                             17:
                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                          317743-102
                                                                             Score 303.6; DB 2; Pred. No. 1.7e-82;
                                                              Mismatches 274;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ψ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                210
                                                              Indels
                                                                                            Length 756;
                                                            ζ,
                                                          Gaps
                                                          <u>ب</u>
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                     US-08-414-657D-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QΨ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                              Sequence 18,
Patent No. 5
                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                     APPLICANT: APPLICANT:
                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                        TITLE OF INVENTION: Limbic System-A:
TITLE OF INVENTION: Protein and DNA
NUMBER OF SEQUENCES: 60
                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                               APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                                                                            APPLICANT: Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           868 tatgggaactacacttgcgtggcctccaaccaagctggg 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                              STREET: 99, L...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541 AGCAATGAAGCCACCACAGGACGACAAGCTTCACTCAAATGTGAGGCCTCGGCAGTGCCT 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      808 aaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgac 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 GAGGGTTCCTACACTTGCTCAGTTCAGACACAGCATGAGCCCCAAGACCTCCCAAGTTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                   COMPUTER:
                                                                          ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 TTGATCGTACAAGTCCCACCAAAGATCTCCAATATCTCCTCGGATGTCACTGTGAATGAG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                208 aaccgcagcaccatcctctatgctgggaatgaccaagtggtgcctggatcctcgcgtggtc 267
   OPERATING SYSTEM:
                                                                                            COUNTRY:
                                                                                                                                           ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building 3, Suite 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                         10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACGGCAACTACACCTGTGTGGCTGCCAACAAGCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGATTAAGAGCACGGAGGGCCAGTCTTCCCTGACGGTGACCAACGTCACTGAGGAGCAC 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCACCTGACTTTGAGTGGTACCGGGATGACACTAG---GATAAATAGTGCCAATGGCCTT 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGGATGTCAAACAAGTCAAGGTCACTGTGAACTATCCTCCCCACTATCACAGAATCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cccgtggtacggaggtaaaggtcaccgtgaactatccaccatacatttcagaagccaag 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCATCACCAGGGAGCAGTCAGGCAAATATGAGTGCAAAGCTGCCAACGAGGTCTCCTCG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggccgcg 627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGACACCTTACACCAACTGGAAGGGAATTTGAAGGAGAAGAAGAATATCTGGAGATCCTT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agacacatctctcccaaaagcggttggctttgtgagtgaagacgaatacttggaaattcag 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCAGCAACGTGACTCTGGTCTGCATGGCCAATGGCCGTCCTGAACCTGTTATCACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             999aacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgg 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctcccattaatgaa 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGAGAAACGCCATTCTCTGGAATACAGCCTCCGAATCCAGAAGGTGGATGTCTATGAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACCGTTCTGGCATCATTTTTGCTGGACATGACAAGTGGTCTCTGGACCCACGGGTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gagggccttacacctgctcggtgcagacagaccaacccaaagacctctagggtccac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cttctgagcaacaccccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgac 327
                                                                            08543
                                                                                                                                                                                                                                                                                                                                                                  5861283
                                                                                                                                                                                                                                                                                                                                                                                 Application US/08414657D
                                                                                            USA
                                                                                                                                                                                                                                                                             Pimenta, Aurea
Fischer, Itzhak
IBM Compatible
SYSTEM: DOS
                                     Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              387
```

```
B
                                                                                                               Qy
                                                                                                                                                      B
                                                                                                                                                                                        δã
                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-414-657D-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Bloom, Allen
REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 756 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
541 AGCAATGAAGCCACCACAGGACGACAAGCTTCCCTCAAATGTGAAGCCTCAGCGGTGCCT
                   688 ggtacaggtgtccccgtgggacaaaaggggacactgcagtgtgaagcctcagcagtcccc 747
                                                                             481
                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                               448
                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                   508
                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                              241 TIGATIGIACAAGTICCACCAAAGAICTCCCAACAICTCCTCGGAIGICACIGIGAAIGAG 300
                                                                                                                                                                                                                                                                                                                                                                                                                          388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            148 ggggagagcgccaccctcaggtgcactattgaccaaccgggtcacccgggtggcctggctta 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 31-MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGGGACACGGCCATCCTCAGGTGTGTGGTAGAAGACAAGAACTCGAAAGTGGCCTGGTTG 60
                                                                         ggcatcacccgggagcagtcaggggactacgagtgccgtgcctccaatgacgtggccgcg 627
                                                                                                                                                                                                                                                 agacacatctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcag 567
                                                                                                                                                                                                                                                                                                   GGCAGCAATGTAACCCTGGTCTGCATGGCCAATGGGCGCCCTGAACCTGTTATCACCTGG 360
                                                                                                                                                                                                                                                                                                                           gggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgg 507
                                                                                                                                                                                                                                                                                                                                                                                                      ctcattgtgcaagtatctcccaaaattgtagagatttcttcagatatctccattaatgaa 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaccgcagcaccatcctctatgctgggaatgacaagtggtgcctggatcctcgcgtggtc 267
                                                                                               cccgtggtacggagagtaaaggtcaccgtgaactatccaccatacatttcagaagccaag 687
                                                                                                                                                  GGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGCCAACGAGGTCTCCTCC 480
                                                                                                                                                                                                                            AGACACCTTACACCACTTGGAAGAGAATTTGAAGGAGAAGAAGAATATCTGGAGATCCTA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGGATCCTACACATGCTCAGTTCAGACACAGCATGAGCCCCAAGACCTCTCAAGTTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gagggcccttacacctgctcggtgcagacagacaaccacccaaagacctctagggtccac 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAAGGTGGATGTCTATGAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgac 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCTGGACCCTCGGGTTGAG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28.9%;
63.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 278;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 298.2; DB 2; Pred. No. 7.5e-81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
600
                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
```

1.

밁 Ş

```
ď
                                       γ
                                                                                                                                                                     US-08-414-657D-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 11, Application US/08414657D
; Patent No. 5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-414-657D-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                             Matches
                                                                                           Query Match 9.7%;
Best Local Similarity 67.0%;
                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION: 609-520-3214
                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
REGISTRATION NUMBER: 29,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Levitt, Pat
APPLICANT: Pimenta, Au:
APPLICANT: Fischer, It:
                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                       148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    868 tatgggaactacacttgcgtggcctccaacaagctgggc 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601 GCACCTGACTTTGAGTGGTACCGGGATGACACCAG---GATAAACAGTGCAAACGGCCTT 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    748 tcagcagaattccagtggtacaaggatgacaaaagactgattgaaggaaaggaaaggggtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       658 GAGATTAAGAGCACTGAGGGCCAGTCCTCCCTGACGGTGACCAACGTCACTGAGGAACAC 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       808 aaagtggaaaacagacctttcctctcaaaactcatcttcttcaatgtctctgaacatgac 867
                                                                                                                                                                                  NAME/KEY: Coding LOCATION: 1...219 OTHER INFORMATION:
                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: doub
                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 31-MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY:
1 GGGGACACAGCCATCCTCAGGTGCGTTCTAGAAGACAAGAACTCAAAGGTGGCCTGGTTG 60
                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                    9999agagcgccaccctcaggtgcactattgacaaccgggtcacccgggtggcctggcta 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACGGCAACTATACCTGTGTGGCTGCCAACAAGCTCGGC 756
                                                                            142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Dechert Price & Rhoads
997 Lenox Drive, Building 3, Suite
                                                                                                                                                                                                                                                                                                              219 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pimenta, Aurea
Fischer, Itzhak
                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM Compatible
                                                                                                                                                                                                       Coding Sequence 1...219
                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Diskette
                                                                                                                                                                                                                                                                            double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                            29,135
                                                                                                                                                                                                                                                                                                                                                    11:
                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                           317743-102
                                                                        Score 100; DB 2;
Pred. No. 5.2e-21;
0; Mismatches 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   210
                                                                                                            Length 219
                                                                        Indels
                                                                        0;
                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    807
                                                                        0
```

```
밁
                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
US-08-414-657D-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                  US-08-414-657D-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ρy
                                                             Query Match 9.2
Best Local Similarity 65.6
Matches 139; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 12,
Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Pisenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
TITLE OF INVENTION: Limbic System-Associated Membrane
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 219 base pairs
                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                  148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
CITY: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          268 cttctgagcaacacccaaaacgcagtacagcatcgagatccagaacgtggatgtgtatgac 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Coding Sequence LOCATION: 1...219
OTHER INFORMATION:
                                                                                                                                                                                                                                                LENGTH: 219 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Bloom, Allen REGISTRATION NUMBER: 29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 31-MAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE:
                                                                                                                                                                                                                                    TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Dechert Price & Rhoads STREET: 997 Lenox Drive, Building 3, Suite 210
1 GGGGACACGGCCATCCTCAGGTGTGTGGTAGAAGACAAGAACTCGAAAGTGGCCTGGTTG 60
                      9999agagegeceacecteaggtgeactattgacaacegggtcaeeegggtggectggeta 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGGTTCCTACACTTGCTCAGTTCAGACACA 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gagggcccttacacctgctcggtgcagacaga 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2, Application US/08414657D
5861283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAR-1995
                                                                             9.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/414,657D
                                                                 0;
                                                               Score 95.2; DB 2;
Pred. No. 1.5e-19;
0; Mismatches 73;
                                                                                                                                                                                                                                                                                                                                                                                                    317743-102
                                                                                            Length 219;
                                                                 Indels
                                                               0;
                                                             Gaps
                                                             0;
```

망 ОĀ

1 GGCAGCAACGTGACTCTGGTCTGCATGGCCCAATGGCCGTCCTGAACCTGTTATCACCTGG 60 gggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgg 507

448

Query Match
Best Local Similarity
Matches 115; Conserv

Conservative

0;

Score 77.8; DB 2; Pred. No. 2.5e-14; 0; Mismatches 62

Length 177; Indels

0; Gaps

0

7.5%; 65.0%;

```
OTHER INFORMATION:
US-08-414-657D-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
US-08-414-657D-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13, Application US/08414657D Patent No. 5861283
                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: BLOOM, Allen
REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 3177
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 177 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
COMPUTER: IBM Compat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukareva, Victoria
                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Limbic System-A TITLE OF INVENTION: Protein and DNA NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            208 aaccgcagcaccatcctctatgctgggaatgaccaagtggtgcctggatcctcgcgtggtc
                                      NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 GAAGGATCCTACACATGCTCAGTTCAGACACA 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       328
                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 997 Lenox Dr
CITY: Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Dechert Price & Rhoads
STREET: 997 Lenox Drive, Building 3, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 AACCGCTCTGGCATCATCTTCGCTGGACACGACAAGTGGTCTCTGGACCCTCGGGTTGAG 120
                                                                                                    TOPOLOGY: linear
                                                                                                                                                                                                                        TELEX:
                                                                                                                                                                                                                                       TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gagggcccttacacctgctcggtgcagacaga 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGAGAAACGCCATGCTCTGGAATACAGCCTCCGAATCCAGAAGGTGGATGTCTATGAT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cttctgagcaacacccaaacgcagtacagcatcgagatccagaacgtggatgtgtatgac 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                        Coding Sequence 1...177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Levitt, Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/414,657D
                                                                                                                                                                                                    13:
                                                                                                                                                                                                                                                                                                  317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              267
```

Q

568

ggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggcc 624

```
Qy
                                                                            밁
                                                                                                             δÃ
                                                                                                                                                                                                                                              ; LOCATION: 1...177
; OTHER INFORMATION:
US-08-414-657D-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-414-657D-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14, Application US/08414657D Patent No. 5861283
                                                                                                                                                    Matches 115;
                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 177 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Pimenta, Aurea APPLICANT: Fischer, Itzhak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Limbic System-A:
TITLE OF INVENTION: Protein and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                            448 gggaacaatattagcctcacctgcatagcaactggtagaccagagcctacggttacttgg 507
                                 508 agacacatctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcag 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 GGCATCACCAGGGAGCAGTCAGGCAAATATGAGTGCAAAGCTGCCAACGAGGTCTCC 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     568 ggcatcacccgggagcagtcaggggactacgagtgcagtgcctccaatgacgtggcc 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              508 agacacatctctcccaaagcggttggctttgtgagtgaagacgaatacttggaaattcag 567
                                                                                                                                                                    y Match 7.5%;
Local Similarity 65.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
CITY: I
   61
                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Bloom, Allen REGISTRATION NUMBER: 29, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                 NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Dechert Price & Rhoads STREET: 997 Lenox Drive, Building 3, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGACACCTTACACCAACTGGAAGGGAATTTGAAGGAGAAGAAGAATATCTGGAGATCCTT 120
AGACACCTTACACCACTTGGAAGAGAATTTGAAGGAGAAGAAGAATATCTGGAGATCCTA 120
                                                                        GGCAGCAATGTAACCCTGGTCTGCATGGCCCAATGGGCGCCCTGAACCTGTTATCACCTGG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08543
                                                                                                                                                                                                                                                                                                                                                                        nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lawrenceville
                                                                                                                                                                                                                                                                                                                                                                                         177 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhukareva, Victoria
VENTION: Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                    Coding Sequence 1...177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Levitt, Pat
                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAR-1995
                                                                                                                                                                                                                                                                                                                                                            double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/414,657D
                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              317743-102
                                                                                                                                                                  Score 77.8; DB 2; Pred. No. 2.5e-14;
                                                                                                                                                  Mismatches
                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          210
                                                                                                                                                                                    Length 177;
                                                                                                                                                  Indels
                                                                                                                                                0;
                                                                                                                                                0;
```

```
망
         δÃ
                                                                                γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-414-657D-15
                                                                                                                                                                                                      US-08-414-657D-15
                                                                                                     Hest Local Similarity 61.5%;
Matches 123; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15, Ap
Patent No. 5861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Pimenta, Aurea
APPLICANT: Fischer, Itzhak
APPLICANT: Zhukarev.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bloom, Allen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 198 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: 609-520-3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Limbic System-A-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
            766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 GGCATCACCAGGGAACAGTCAGGCAAATATGAGTGCAAGGCTGCCAACGAGGTCTCC 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 99/ LC...
                                                                                                                                                                                                                    NAME/KEY: Coding LOCATION: 1...198 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 609-520-3259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 29,135
REFERENCE/DOCKET NUMBER: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 31-MAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Dechert Price & Rhoads STREET: 997 Lenox Drive, Building
                                               \vdash
                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
tacaaggatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacagacct 825
                                             GGACGACAAGCTTCACTCAAATGTGAGGCCTCGGCAGTGCCTGCACCTGACTTTGAGTGG
                                                                            ggacaaaaggggacactgcagtgtgaagcctcagcagtcccctcagcagaattccagtgg 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/08414657D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhukareva, Victoria
                                                                                                                                                                                                                                       Coding Sequence 1...198
                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAR-1995
                                                                                                                                                                                                                                                                                                          double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Limbic System-Associated Membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/414,657D
                                                                                                                                                                                                                                                                                                                                                                               <u>ب</u>
5
                                                                                                             Score 65.6; DB 2;
Pred. No. 1.3e-10;
0; Mismatches 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     317743-102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Suite 210
                                                                                                                                                 Length 198;
                                                                                                                Indels
                                                                                                                ω
••
                                                                                                                Gaps
                                             60
```

B

61

P 09

118 GGCCAGTCTTCCCTGACGGTGACCAACGTCACTGAGGAGCAACTACGGCAACTACACCTGT 177

tteeteteaaaaeteatettetteaatgtetetgaacatgaetatgggaaetaeaettge 885

TACCGGGATGACACTAG---GATAAATAGTGCCAATGGCCTTGAGATTAAGAGCACGGAG 117

1.